

Modeling Social Cognitive Repercussions of Education Attainment in Filipino Women

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Through structural equation modeling, this study demonstrated that high educational attainment results in perceptions of self-efficacy, high self-esteem, a propensity for self-improvement, and achievement-oriented attitudes among 640 Filipino women. Success expectancies, however, were low. Stronger compensatory influences from the respondents high educational attainment, self-efficacy, and achievement orientation outweighed the depressive impact of low success expectancies on the desire for self-improvement. Findings underscore the importance of continued support for educational programs for the poverty-stricken in developing countries.

What are the social cognitive consequences of educational attainment among Filipino women? In addressing this question, the author formulated a causal model containing structural and cognitive components. The structural component of the model was based on the sociological literature on the relationship between education and self-efficacy. Low educational levels have been associated with personal powerlessness or the perception that results are determined by external and uncontrollable forces (Coady, 1950; Ferguson & Johnson, 1990; Jessor, et al., 1968; Livingstone, 1945; Vann, 1948). Conversely, high educational attainment

correlated with perceptions of self-efficacy or personal control (Lefcourt, 1976) defined as the belief that outcomes are contingent upon one's actions (Mirowsky & Ross, 1983).

The model's cognitive component tapped attribution theory's emphasis on people's attributions or causal explanations of events. This theory clarifies the relationship between phenomena (affects) and the reasons (responsible agents) behind events (Weiner, 1972). Attribution theory further contends that people develop consistencies or attributional styles in explaining to themselves why events happen (Gardner, et al., 1959). Personal powerlessness constitutes an example of an attributional style (Abramson, Soligmen, & Teasdale, 1978) characterized by an external locus of control (Rotter, 1966) and the perception of uncontrollability. People's attributions determine achievement-related affects (pride or shame) and expectancies of success. The level of expectations, in turn, determines the subsequent response.

Cultural context

A fragmented gender construction characterizes the Philippine cultural landscape (Blanc-Szanton, 1990). On the one hand, tradition places Filipino women on a pedestal (Fox, 1965). On the other hand, patriarchy perpetuates stereotypes of women as "homemakers" and "emotional." Sustained by Spanish and American colonialism (Sobritchea, 1990), this clash of ideologies has impacted Filipino women's societal status. While 54 percent of all Filipino college students and 655 of postgraduates are women, this high level of educational attainment has not translated into high labor force participation and economic advantages (Licuanan, 1991). While 875 of Filipino men are economically active, among Filipinas aged 15 or older, only slightly more than half are economically active (Licuanan, 1991). In 1986, Filipinas earned 37 centavos for every peso their male counterparts earned. Even when employed, Filipinas constitute a mere 25 percent of managerial positions. The clerical, sales, and domestic service sectors register a disproportionate percentage of Filipinas (Licuanan, 1991). Although prominent in appointive offices in the diplomatic corps, career services, and the judiciary, Filipinas have yet to establish significant visibility in elective offices (Rodriguez, 1990). Poverty-stricken, many Filipinas migrate to urban

centers or foreign countries in search of a better life. Unfortunately, many become victims of exploitations and abuse by their partners or employers (Aguilar, 1987).

Bicolanas, residents of the Bicol Peninsula, and respondents of this study share the paradoxical status of their Filipina sisters. Bicolanas have become successful engineers, bank managers, military officers, technicians, high-level politicians, university presidents, bar topnotchers, lawyers, accountants, entrepreneurs, surgeons, dentists, and professors. Filipinos respect the Bicolana's strength of character, leadership skills, sense of responsibility, and entrepreneurial talent (Polotan, 1967; Mercado, 1966). However, 70 percent of Bicolanas fall below the poverty line (Bicol University Development Foundation, Inc., 1992). They also show a deep streak of conservatism (Mercado, 1966). Ethnographic vignettes characterize Bicolanas as tradition-bound women who perform role of dutiful wives, solicitous partners, and devoted housewives (Polotan, 1967).

Methodology

Setting. Bicol has a poverty incidence of 72.3 percent. It also holds the record for the highest population growth (2.8 percent), highest malnutrition rate (44 percent), and the highest emigration rate (2.8 percent) among the 12 regions in the Philippines (National Economic and Development Authority, 1990). Located along the Philippine typhoon belt, the region experiences an average of four typhoons annually.

Model. Guided by the sociological and psychological literature discussed in the introduction, the author constructed a causal model positing that a high educational attainment generates sequelae of cognitions, namely, self-efficacy, favorable attitudes toward achievement, high self-esteem, high success expectancies, and a strong motivation for self-improvement.

Measurement. The variables self-efficacy, attitudes toward achievement, success expectancies, self-esteem, and motivation for self-improvement were measured by original scales, namely, the Culture-Sensitive Personal Powerlessness Scale (CSPPS), the Valuation of Achievement Scale (VAS), the Success Expectancies Scale (SCXS), the Self-Esteem Scale (SES), and

the Propensity for Self-Improvement Scale (PSIS), respectively. Internal consistencies of these five scales ranged from Cronbach's alpha 0.76 to 0.89. An ordinal scale consisting of different educational levels measured the respondents educational attainment. A questionnaire in both English and Bicol contained the scales and indices along with questions on demographic characteristics. Research assistants either self-administered the questionnaire or conducted face-to-face interviews, depending upon the respondents' degree of literacy.

Sampling. The sample of 620 Bicolanas came from a purposive, multistage strategy. Initially, the author classified *barangays* (villages) into low- and high-poverty groups. He then randomly selected two villages each group. He later secured rosters of female voters aged 18 years or above and randomly selected 155 women from each village. The researcher attained a 100 percent response rate largely due to the research team's native familiarity with the culture, language, and cultural gatekeepers.

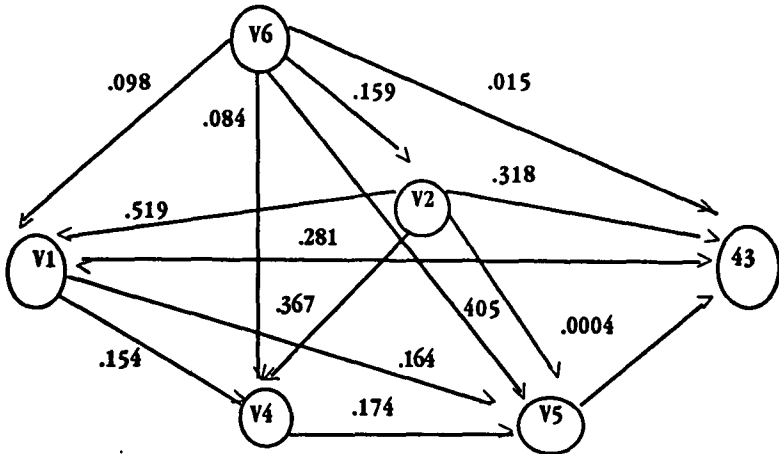
Results

Demographic and cognitive profiles of respondents. The typical respondent was poor, 36-years old, married, Roman Catholic, a member of a recreational club, high-school educated, and interested in adult education programs. On the average, the respondents showed self-efficacy rather than personal powerlessness (an average category score of 4.37 out of 5.00 as the most self-efficacious). Respondents indicated strong agreement to these representative statements: "People succeed because of hard work, not because of luck" and "I have the power to change my life for the better." Furthermore, the women demonstrated a strong desire for self-improvement (average score of 4.25 out of 5.00) by expressing agreement to the following typical scale statements: "I owe it to myself to improve my present situation" and "I am willing to devote effort in improving my current conditions." Respondents demonstrated favorable attitudes toward achievements (average score of 4.32) as indicated by strong agreement to the following representative scale items: "I would rather work than remain idle" and "Accomplishments increase my self-respect." An average score of 3.87 indicated a relatively high self-esteem as measured by these two sample scale items: "I believe I can contribute something valuable to society" and "I feel that I have more

strengths than weaknesses.” Success expectancies, however, were relatively low (2.02). The majority felt that their situation three years from now would be the same or even worse than the present. The women also expressed pessimism about the outcomes of poverty alleviation programs.

Support for hypothesized model. The hypothesized cognitive sequelae generated by educational attainment was confirmed as manifested by several statistical indicators. The EQS estimation of the model yielded an excellent fit indicated by the chi-square probability value of 0.61 (df=1), and a fit index of 1.00. Supplementary indicators likewise indicated a good fit. Linear dependency among the variables was not obtain.¹ The residual plot showed symmetry, while the covariance residuals registered minute values (see Figure 1).

Figure 1. The Hypothesized Model: Standardized Coefficients (to be interpreted like ordinary linear regression coefficients)



- V1 - Personal Powerlessness
- V2 - Valuation of Achievement
- V3 - Propensity for Self-Improvement
- V4 - Self-Esteem
- V5 - Success Expectancies
- V6 - Educational Attainment

Goodness-of-fit indices: fit index=1.00; chi-square=0.256; p=0.613 at df=1

Discussion

This study demonstrated the positive effects resulting from high educational attainment. Like most Filipinos, Bicolanas view education as the "royal road" to upward social mobility. Poor parents, in particular, consider education as the only legacy they can leave their children. Hence, poor parents forego luxuries and engage in back breaking labor in order to invest in their children's education. Such efforts, this investigation revealed, have not been in vain. Forty percent of the respondents went to college. An impressive 97 percent had at least an elementary education. Further, 94 percent possessed knowledge of different crafts and marketable skills.

The Bicolanas' noteworthy educational achievements have resulted in strong perceptions of self-efficacy or personal control. This findings is significant because it contradicts the well-established link between poverty and powerlessness (Lefcourt, 1976; Lewis, 1959). Apparently, the relatively high educational attainment of the respondents served to negate the powerlessness experienced by people who live in adverse daily circumstances. The respondents have lent further credence to the adage that knowledge is power. As educators have always believed, learning makes people "masters of their own destiny" (Coady, 1950). Indeed, even if people choose to control their environment or even if others grant them control, individuals cannot experience mastery if they lack the skills and knowledge required in a given situation. As Ferguson and Johnson (1990) noted, choice without knowledge, information, or consciousness is not really choice.

Aside from enhancing self-efficacy, education has developed favorable attitudes toward achievement among the respondents. This findings supports the argument that education provides drive, direction, and purpose (Livingstone, 1945). Education, indeed, produces "makers" who think life "as something to be created by their efforts" (Vann, 1984).

Equipped with a perception of personal control and positive definitions of achievement, the Filipino women in this study showed high self-esteem. This result corroborates studies demonstrating the maximization of affective reactions among achievement-oriented people (Fish & Karabenick, 1971) and those who believe that outcomes are attributed to controllable factors

(Kaufman, 1989; Beckman, 1970). Powerless individuals, in turn, are burdened by a belief that they are helpless victims of fate. Therefore, they feel useless and develop a shaky confidence in their abilities (Ferguson & Johnson, 1990).

Interestingly, the respondents' high self-esteem did not produce high success expectancies which was the model's prediction. Extant research shows that success expectancies rise when outcomes are seen as responsive to manipulation. Conversely, if a successful outcome is attributed to an uncontrollable external element such as luck, success expectancies fall because of expected randomness and uncertainty (Phares, 1957; Rotter, 1966). How then can one account for the low success expectancies of the Filipino women? Recall that the women were overwhelmingly poor. Their low success expectancies could be a reflection of pervasive cynicism and hopelessness common among the poor (Lewis, 1965; Gonzalez, 1977). Moreover, the respondent's pessimism could be a reaction to unfulfilled potentials of an otherwise highly educated group. Note that while the average educational attainment of the women was senior high school graduate and that 40 percent of them went to college, only 255 managed to live above the poverty line. This finding brings to mind Licuanan's (1991) observation that the Filipino women's achievements in education have not been effectively translated into economic advantages.

While the women's success expectations were low, their motivation for self-improvement was strong. This desire for self-improvement showed in the respondent's high average score on the Propensity for Self-Improvement Scale. Furthermore, this strong motivation was explicitly manifested in 90 percent of the women stating that they regularly read and monitored self-help or personal development over the radio or television. Eighty percent expressed their willingness to participate in skills training programs and seminars designed to enhance their present capabilities. About 60 percent signified their intentions to pursue further formal education.

What can account for the intriguing of pessimism and striving? The data revealed that the women's motivation for self-improvement was not adversely affected because of the stronger compensatory influences of achievement valuation, self-efficacy, and high educational attainment

(see Table 1). Notice that the magnitude of effects of these variables exceeds that of success expectancies.²

Table 1. Decomposition of Effects*

Predictors	Effects		
	Direct	Indirect	Total
1. Achievement valuation	.319	.165	.484
2. Self-efficacy	.282	.015	.297
3. Educational attainment	.015	.127	.142
4. Success expectancies	.062	.000	.062

*The dependent variable is propensity for self-improvement.

These findings are consistent with those of Seligman (1991) who observed that self-efficacy enables people to attempt tasks which they might otherwise avoid and they tend to be more persistent at these task. Self-efficacy also heightens the resolve to improve one's life by acting on the environment (Seeman, 1972). Relatedly, the proactive mindset engendered by positive attitudes toward achievement and the educational process lead people to undertake self-improvement efforts more vigorously (Taylor, 1989).

The respondents' zeal for self-improvement deserves commendation. In the midst of pessimism, Filipino women have not succumbed to the negative self-talk and propensity for decreased effort characteristic of the powerless (Marone, 1992). Instead, they have forge ahead with personal development despite the reality that the rewards accorded by a patriarchal society to women will not be commensurate to invested effort.

Implications

Encouraging educational ambition among young Filipino women must continue to be a key strategy in poverty alleviation. The pursuit of education fends off apathy and powerlessness among the poor who frequently view life with these perceptions:

To me, one's destiny is controlled by a mysterious hand that moves all things. Only for the select do things turn out as planned; to those of us who are born to be tamale eaters, heaven sends only tamales. We plan and plan and some little thing happens to wash it all away (Lewis, 1959).

The educated person, however, will respond to the vagaries of existence with positive self-talk, greater optimism, self-confidence, and persistence even in the face of repeated failures (Rotter, 1966, Phares, 1957). A positive frame of mind and tenacity are necessary for women situated in cultures where sexism and discrimination continue to deny women their rightful place in society. Filipino women, for instance, will have to contend with the push-and-pull forces in a society which encourages women's accomplishments but at the same time imposes limits.

Moreover, the constructive cognitions that result from education will be critical factors in the success of continuing education programs. Without positive attitudes toward achievement, feelings of personal control, high self-esteem, and high success expectations, women may not be motivated to pursue lifelong educational opportunities. Even granting the possibility that an unmotivated and pessimistic woman will initially participate in a skill training program, she is not likely to persist at learning new competencies (Seligman, 1991). Thus, adult education programs which do not emphasize the cognitive readiness of participants are likely to be exercises in futility. Paradoxically, however, in a society where poverty constantly threatens the dignity and sanity of its constituents, avenues for continuing education remain a viable mechanism for survival.

Endnotes

¹Structural equation models attempt to capture in equation structure some causal process that explains the data, especially the interrelations among variables (Bentler, 1992). The adequacy with which a model truly mirrors a causal sequence cannot be done on the basis of empirical results. Instead, a model must be guided by a prior theoretical framework that contains the essential variables of a particular structural system. The model builder must ensure that no key variables are omitted. Attention must also

be given to the correct specification of conditions and times of measurement (Gollob & Reichardt, 1987). Statistical indicators, such as probability values for chi-square statistics and fit indices, measure how closely a proposed model reproduces the observed covariances of variables. A good model results in a study would be extremely unlikely to be observed (Bentler, 1992). Fit indices close to 1.00 also indicate a good fit.

²A variable can have both direct and indirect effects. For instance, in Figure 1, V2 has direct and indirect effects on V3. The magnitude of the direct effect is simply 0.318. Total indirect effects summarize how one variable influences another regardless of the particular paths chosen to trace from one variable to another (Bentler, 1992). The indirect effect is given by the product of the standardized coefficients represented by the arrows. Thus, the total indirect effects of V2 on V3 is computed through the following paths: V2 via V5 ($.0004 \times .055 = .000022$); V2 via V1, V4, and V5 ($.519 \times .154 \times .174 \times .055 = .00076$); and V2 via V4 and V5 ($.367 \times .174 \times .055 = .0035$). The total indirect effect is .004282; that is, the sum of .000022, .00076, and .0035.

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