

Enhancing the Efficacy of Lecturers in Educating Student Cohorts Consisting of Culturally Diverse Groups in a Medical University

Dr. Srikumar Chakravarthi

Department of Pathology, Faculty of Medicine, International Medical University

57000 Kuala Lumpur, Malaysia

E-mail: srikumar_chakravarthi@imu.edu.my

Nagaraja Haleagrahara & John Paul Judson

Department of Human Biology

Faculty of Medicine, International Medical University, Malaysia

Abstract

Lecturers exert a potent influence over the achievement of all students, low-income culturally diverse students in particular. Although recent research has confirmed that lecturer involvement is critical for promoting academic engagement of low-income and ethnically diverse students in America and other countries, other literature suggests that lecturers have lower expectations for and fewer interactions with these students. These findings have prompted calls for promoting lecturers self-efficacy for working with students from diverse backgrounds, especially in a country like Malaysia, where there is a coexistence of students of various ethnic diverse groups, such as Chinese, Malays and Indians. The purposes of this article are (a) to summarize briefly the literature that examines the effect of lecturers efficacy on academic and behavioral outcomes of students, especially culturally diverse students; (b) to disseminate the findings of a lecturer-training program designed to promote lecturer efficacy in relation to culturally diverse students; and (c) to provide lecturers, administrators, and lecturer trainers with methods to increase lecturer efficacy when working with culturally diverse learners.

Keywords: Lecturer efficacy, Lecturer training, Culturally diverse, Ethnic variation

Introduction

Lecturers exert a potent influence over the achievement of all students, low-income culturally diverse students in particular. For instance, a recent study indicated that teacher involvement had a powerful and direct impact on the academic engagement of African American students (Tucker et al., 2002). Other research suggests that teachers have lower expectations for and fewer interactions with minority children (Garibaldi, 1992). These findings have prompted calls for promoting lecturer efficacy for working with students from diverse backgrounds (Frey, 2002).

Based on Bandura's (1986) general theory of self-efficacy, researchers have conceptualized lecturer efficacy as the beliefs that lecturers and teachers have about their skills and abilities to create desirable outcomes for students (Gibson & Dembo, 1984). A lecturer's sense of efficacy is one of the few lecturer characteristics consistently related to student achievement. In other words, lecturers who believe that student learning can be influenced by effective teaching despite home and peer influence and who have confidence in their ability to teach persist longer in their teaching efforts, provide greater academic focus in the classroom, give different types of feedback, and ultimately improve student performance (Gibson & Dembo, 1984). Two dimensions of teacher efficacy have been identified: (a) personal teaching efficacy, or teacher beliefs about their own ability to bring about change in their students; and (b) general teaching efficacy, or teacher beliefs concerning the extent to which they believe teaching can overcome external influences on student outcomes (Gibson & Dembo, 1984).

The importance of lecturer efficacy has been established through numerous research studies focusing on the effect of teacher efficacy on student achievement (Herman & McLaughlin, 1977; Gibson & Dembo, 1984), classroom management (Gibson & Dembo; Woolf oik & Hoy, 1990), special education referrals (Podell & Soodak, 1993; Soodak & Podell, 1993), family involvement in school (Garcia, 2004), and the adoption of innovation in the classroom. Some authors have found that a lecturer's sense of efficacy was positively related to both improved student outcomes and the percentage of project goals achieved. Furthermore, they found a significant positive relationship between teacher efficacy and the achievement test scores for students in university basic skills classes in math and language. Both studies measured teacher efficacy using two Likert-type scale items ranging from strongly agree to strongly disagree: (a) "When it comes right down to it, a

teacher really can't do much because most of a student's motivation and performance depends on his or her home environment"; and (b) "If I really try hard, I can get through to even the most difficult and unmotivated students."

The relationship between lecturer efficacy and student achievement is likely because of differences in lecturer behaviour. Gibson and Dembo (1984) found important behavioral differences between lecturers with high and low efficacy, differences that may yield variation in student achievement. Using classroom observations, they found that low-efficacy lecturers spent almost 50% of their observed time in small-group instruction, whereas high-efficacy lecturers spent only 28% of their instructional time in small groups. High-efficacy lecturers also spent more time monitoring, checking seatwork, and providing whole-group instruction. This is important because research demonstrates that effective lecturers use more wholegroup instruction and maintain higher levels of student engagement (Good & Brophy, 2003). In addition, significant differences in lecturer feedback patterns following incorrect responses from students were found. When providing a student with an opportunity to respond, low efficacy lecturers were more likely than high-efficacy lecturers to provide the correct answer, call on another student, or allow another student to call out the answer before the student could successfully give the correct response.

Lecturer efficacy also has a relationship with lecturer beliefs about difficult-to-teach students and the decisions they make regarding those students. Soodak and Podell (1994) provided lecturers with a case study of a difficult student. Lecturers were then asked in a free response format to (a) list all the ways the needs of the student might be best met, (b) indicate which suggestions they believed were effective, and (c) state what they believed to be the cause of the student's difficulties. Results indicated that lecturers with higher personal teaching efficacy, or belief in their ability to reach even the most difficult student, were more likely to make lecturer-based suggestions to meeting the needs of the student than lecturers with low personal teaching efficacy. Lecturers with low personal teaching efficacy were more likely to look for solutions outside of their own classroom. This is important because lecturers who look to solutions outside their own classroom and who feel the cause is due to external factors are more likely to refer students to special education (Ashton, 1985).

Referral to special education and bias in referral decisions have been linked to lecturers efficacy. Soodak and Podell (1994) investigated the influence of lecturers efficacy and student problem type on lecturers' placement and referral decisions. One hundred ninety-two general and special education teachers were randomly assigned to receive a case scenario describing a student with a learning and/or behavior problem. Each teacher was then asked to judge (a) whether the student was appropriately placed in general education and (b) whether he or she would refer the student to special education. Results revealed that both general and special education teachers who scored high on both general teaching efficacy and personal teaching efficacy were likely to agree that the student was correctly placed in general education. In other words, lecturers who were confident of their own teaching and the effects of teaching agreed to retain difficult students in general education. Furthermore, Podell and Soodak (1993) investigated referral bias by randomly assigning 240 teachers to provide judgments regarding placement and referral in response to a case study about either a student with academic difficulties or a student with academic difficulties from a low socioeconomic status (SES) family. Lecturers with low efficacy considered general education placement inappropriate for the underachieving students from lower SES families. Lecturers high on teacher efficacy did not differentiate students by SES. Thus, lecturers' referral decisions appear to be biased by variables other than the specific academic difficulty experienced by the student. This is important to note in efforts to educate diverse student populations of various ethnic groups in Malaysia, such as Chinese, Malays and Indians.

Finally, lecturer efficacy is also related to racial attitudes and perceived ability to work with diverse students. Many lecturers feel unprepared to t lecture students from culturally different backgrounds. In one study, a large group of lecturers felt that they could not effectively teach African American students. Inservice lecturers, in particular, reported lower efficacy for lecturing these students, thus indicating the need to offer training to lecturers already in the field as well as to preservice lecturers. In light of the known influence of efficacy beliefs on student outcomes, these findings may in part explain the large-and persistent gap between the school performance of European American students and culturally diverse students, particularly African American and Latino students. Therefore, efforts to increase lecturers efficacy, especially in working with culturally diverse students, are paramount in increasing the low academic achievement and decreasing the disproportionate high school dropout rates among culturally diverse students.

Given the established relationships between lecturers efficacy, lecturers behaviour, and student achievement, the present study targeted lecturers efficacy as a modifiable variable that can yield meaningful changes in the classroom and in student outcomes. The purpose of the present study was to develop and test a training program

for promoting lecturers efficacy for working with students from diverse backgrounds. The training model was based on Carolyn Tucker's Self-Empowerment Theory (SET; Tucker, 20002). The programme that we used is an example of a community-based program grounded in culturally sensitive theory (i.e., SET) and research (i.e., the difference model; Tucker & Herman, 2002). Previous research has shown that the programme has a significant, favourable influence on student academic outcomes.

The present study investigated whether medical university lecturers would benefit from training in the core principles of the programme. Specifically, it was hypothesized that lecturers who participated in a lecturer-training workshop and related consultation session would report a significant increase in their self-efficacy for working with culturally diverse students compared to lecturers who did not receive this training.

Method

Participants

Thirty-one lecturers (14 Indians, 9 Chinese and 8 Malays with a mean of 9.45 years of teaching experience) participated in this study: 20 in the intervention group and 11 in the control group. The lecturers were from the medical faculty of the International Medical University in Kuala Lumpur, Malaysia. The lecturers were randomly assigned to one of three conditions: (a) lecturer only intervention, (b) university-wide intervention (i.e., training of lecturers and non-lecturing university personnel, such as office and corporate staff), or (c) no training control group. For purposes of the present analyses, the teacher-only and university-wide intervention conditions were collapsed into a single group ($n = 23$).

Procedure

Lecturers in both treatment conditions attended a 3-hour briefing designed to educate lecturers about methods and strategies that are most effective when lecturing culturally diverse students. Lecturers who received training were also invited to attend a one of two follow-up consultation sessions at the University 6 weeks after the training. Twelve lecturers attended this non-mandatory consultation session intended to answer lecturers' questions about the workshop and address any problems that lecturers experienced implementing the workshop strategies. All lecturer participants completed a questionnaire packet at baseline (prior to the workshop) and again 12 weeks later.

Lecturer-Training Intervention. The training program for lecturers was based on Self-Empowerment Theory (SET; Tucker, 2002), which postulates that behaviour problems and academic failure, as well as prosocial behavior and academic success, are significantly influenced by levels of (a) self-motivation to achieve academic and social success, (b) perceived self-control over one's behaviour and academic success, (c) self-reinforcement for engaging in social and academic success behaviours, (d) adaptive skills for life success, and (e) engagement in success behaviours. Thus, SET is very consistent with other theories of autonomous self-regulated, or self-efficacious, behaviour (Connell, 1991; Connell, Spencer & Aber, 1994; Kanfer, 1990; Zimmerman & Martinez-Pons, 1988). SET borrows definitions from these theories (e.g., self-efficacy) and intervention strategies. Above all, SET uniquely postulates that self-empowerment of multi racial students is particularly indicated, given that many of these students and their families experience poverty, discrimination, and racism that impede goal attainment and foster a sense of powerlessness.

The overall training program objectives were (a) to empower lecturers to meet the challenges involved in lecturing students from diverse backgrounds and to prepare those students for academic and social success; (b) to share ways to self empower culturally diverse students to achieve against all odds; (c) to identify ways to self-empower parents of culturally diverse students for participating in following the progress of the education of their children studying in medical college; (d) to normalize the feelings, frustrations, concerns, and questions sometimes experienced when lecturing culturally diverse students; and (e) to share practical, culturally sensitive solutions to questions and problems that have occurred in efforts to teach, understand, and give psychosocial support to culturally diverse students in the classroom. To achieve these objectives, the researchers relied on didactic presentations, role-plays, and opportunities to practice learned behaviour management skills.

The workshop focused on ways that lecturers and other university personnel can effectively empower students to achieve against all odds by preparing them to do the following: (a) to teach themselves (using self-instruction-based learning); (b) to motivate themselves (e.g., using short and long-term goals); (c) to self-manage their behaviours and express their feelings constructively; (d) to use adaptive skills such as effective communication to engage in success behaviours (i.e., arriving on time and being prepared, maintaining a positive attitude, participating actively in group discussions, and setting goals and working hard to reach them); and (e) to

praise themselves for effort, progress, and success in the process of learning and using adaptive skills and success behaviors.

Measures

Lecturers completed an assessment battery to assess the effects of workshop training participation, including measures of general teacher self-efficacy (GTSE), culturally sensitive teacher self-efficacy (CTSE), and prejudice (the Quick Discrimination Index, QDI). Previous studies have demonstrated that the QDI has excellent psychometric properties (Ponterotto et al., 1995). The 16-item GTSE (e.g., "When I really try, I can get through to the most difficult students") and the 10-item CTSE (e.g., "I have the knowledge and skills to be sensitive to the needs and preferences of culturally diverse students") were developed for the present study based on Bandura's (1977) recommendation for constructing self-efficacy measures. Analysis of data from the present sample as well as data from a separate but similar sample of lecturers revealed that both scales had high levels of internal consistency: for the GTSE, alpha ranged from .70 to .82; for the CTSE, alpha ranged from .85 to .88.

Results

An analysis of covariance (ANCOVA) was conducted on CTSE posttest scores, using CTSE pretest scores as the covariate. Results indicated a significant main effect for treatment condition, $F(2, 59) = 4.67, p = .035$. Inspection of adjusted means indicated that lecturers who participated in the workshop reported significantly higher TESQ scores at posttest (adjusted $M = 6.21$; $SE = .10$) compared to control participants (adjusted $M = 5.93$; $SE = .08$). Analyses with the GTSE and QDI as dependent variables were not significant, suggesting that the treatment effect was specific to promoting culturally sensitive lecturing self-efficacy. In addition, workshop participants rated the workshop favorably and evidenced a significant increase in their knowledge about culturally diverse students.

Discussion

The success noted by the lecturers training programme in the study above provides some guidelines for lecturers, administrators, and lecturer trainers in their efforts to increase lecturer efficacy when working with culturally diverse students. First, by developing an understanding that multiple external factors (e.g., social, cultural, economic, political, university, neighborhood, family, parents) can impact the academic and social behaviours of students, lecturers can come to appreciate that each student must be taught to achieve under whatever conditions exist. Lecturers and other school personnel can accomplish this by empowering their students with the skills necessary to become successful in university. By self-empowering students, lecturers will feel that the efforts they make can have an effect on students in their classrooms despite negative influences that are often viewed as beyond their control.

Lecturers can also provide learning experiences that are designed specifically to promote the self-empowerment of culturally diverse students and all other students in their classrooms. Self-empowerment experiences include experiences that facilitate self-praise, adaptive skills, and success behaviors for social, academic, and life success (e.g., asking questions about what one does not understand, using good eye contact). Lecturers can be encouraged to praise themselves for accomplishments that made them feel good, studying and completing class and homework assignments, engaging in success behaviours, and so on. Self-praise can be encouraged by regularly giving students the opportunities to share during class what they praised themselves for the preceding day. Adaptive skills can be facilitated through activities such as roleplays of the inappropriate ways and appropriate ways to respond to upsetting or negative experiences, such as being reprimanded by the lecturers. Success behaviours can be promoted by posting them in the class, reviewing them daily as part of a class, and praising these behaviours when they occur.

In addition, lecturers can conduct very organized classes that include regular reviews of behaviours expected during and outside of classes. Behaviours that are unacceptable inside and outside of the class and the consequences for engaging in these unacceptable behaviours should also be regularly reviewed. It is especially important that lecturers consistently follow through on administering these consequences in response to unacceptable behaviours. Culturally diverse students, like all students, will tend to increase problematic behaviours when consequences are administered in an inconsistent manner. Lecturers can be more successful in their efforts to help culturally diverse students reduce or stop engaging in problem behaviors by spending extra time getting to know these students with the particular goals of (a) establishing a comfortable and positive relationship aimed at making them feel important and respected, (b) determining factors related to their behavior problems, and (c) finding positive behaviors and attitudes to praise in them. Such attention deters viewing culturally diverse students as having behaviour problems and negatively interacting with them in accordance with these views.

On the whole, in our study, we found that culturally diverse students, like other students, tend to respond positively and appropriately in environments where they are genuinely valued, receive positive attention, and feel important and comfortable. To make this possible to a great degree, the lecturers in our study have also modelled the success behaviours and have used the adaptive skills that they want their students to learn and use. Indeed, a well known lesson is that students tend to do what they see adults do rather than what these adults tell them to do.

A second guideline for increasing lecturer efficacy when working with diverse students is acknowledging that cultural sensitivity is necessary when teaching students from diverse backgrounds and knowing what it means to be culturally sensitive. Lecturer-training programs typically emphasize the need to accommodate individual differences through individualized education plans or grouping according to perceived ability. Equal attention should be placed on the role of verbal and nonverbal communication in lecturing and learning aimed at accommodating the impact of cultural sensitivity. It is important also to train lecturers that being a culturally sensitive lecturer involves being aware that there are differences in norms among various cultures, refusing to consider any culture as superior to another culture, and refusing to characterize differences between cultures as deficits based on the norms of the majority culture or some other culture. When lecturers feel competent to effectively teach all students in their classrooms, the academic achievement of culturally diverse youth will most likely increase.

In addition, having a number of culturally sensitive strategies on hand will promote the achievement and social success of students from diverse backgrounds. In our university, this has been seen with good efficacy and communication with students such as Malays, Chinese, Indians and others (expatriate students from Sri Lanka, Singapore, India, Hong Kong, Bangladesh, Indonesia, Pakistan and Myanmar) and increase lecturer efficacy (who are also of various backgrounds like Malay, Chinese, Indians and other expatriate faculty). One such culturally sensitive strategy is to facilitate communication between parents and lecturers about ways to help students be academically successful. These meetings should ideally occur at an agreed time and place, which does not have to be the university. With this in mind, our university follows the Mentor-Mentee system (originally known as tutor-tutee system). Each student is allocated to a full-time faculty member at entry and the student remains under the same mentor throughout the entire duration of the course. The list of mentors and their mentees are circulated to all staff at the beginning of the year. The mentor monitors his mentees' academic performance from the start of the course; to be a person with whom mentees may share any problems; to be available to give advice on particular problems if they arise and to refer to the Dean for alternative arrangements if the mentor cannot handle the problem; to provide monthly report on the mentees' progress. The mentee, on the other hand, is expected to meet the Mentor to discuss his/her academic performance and seek advice on any problem(s) on regular basis.

Another strategy that lecturers might use is to get the students to use their parents to help them to be academically successful. For example, parents can be shown ways to help the students by discussing the follow up and review of their studies, lecture notes and PBL preparation. Lecturers can also engage parents to identify another family member to provide any additional scientific, psychological or personal help to the students in cases where the parents question their capability to provide this help. Lecturers may also need to help culturally diverse students with learning how to study effectively. Indeed, parents, lecturers, and other educators frequently tell culturally diverse students they must study, but very seldom, if ever, has someone helped these students learn how to study.

Conclusion

The findings from the present study indicate that lecturer self-efficacy for working with students from diverse backgrounds is a very successful system in our university, and can also be further significantly increased through brief training of lecturers. These findings are important because they suggest that theories and procedures that were developed and validated in a structured medical programme can be successfully transported and delivered to experienced medical lecturers. Future dissemination of these principles to lecturers in other faculty holds promise for being a realistic mechanism for improving lecturer-student interactions in the lecture halls and PBL sessions and for advancing the academic achievement of culturally diverse students. Ongoing research will determine if increases in lecturer self-efficacy lead to changes in lecturer behaviours and ultimately improvement in student performance.

References

Ashton, P. T. (1985). Motivation and the teacher's sense of efficacy. In C. Ames & R. Ames (Eds.), *Research motivation in education: The classroom milieu*. New York: Academic Press. 2; 141-174.

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Connell, J. P., Spencer, M. B. & Aber, J. L. (1994). Educational risk and resilience in African American youth: Context, self, action, and outcomes in school. *Child Development*, 65, 493-506
- Frey, A. (2002). Predictors of placement recommendations for children with behavioral or emotional disorders. *Behavioral Disorders*, 27, 126-136.
- Garcia, D. C. (2004). Exploring connections between the construct of teacher efficacy and family involvement practices. *Urban Education*, 39, 290-315.
- Garibaldi, A. M. (1992). Educating and motivating African American males to succeed. *Journal of Negro Education*, 61, 4-11.
- Gibson, S. & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76, 569-582.
- Good, T. L. & Brophy, J. E. (2003). *Looking in the classroom*. 9th ed., 227-232. Boston: Allyn & Bacon.
- Kanfer, R. (1990). Motivation and individual differences in learning: An integration of developmental, differential and cognitive perspectives. *Learning & Individual Differences*, 2, 221-239.
- Podell, D. M. & Soodak, L. C. (1993). Teacher efficacy and bias in special education referrals. *Journal of Educational Research*, 86, 247-253.
- Ponterotto, J. G., Burkard, A., Rieger, B. P., Grieger, I., D'Onofrio, A., Dubuisson, A., et al. (1995). Development and initial validation of the Quick Discrimination Index (QDI). *Educational & Psychological Measurement*, 55, 1016-1031.
- Soodak, L. C. & Podell, D. M. (1993). Teacher efficacy and student problem as factors in special education referral. *Journal of Special Education*, 27, 66-81.
- Soodak, L. C. & Podell, D. M. (1994). Teachers' thinking about difficult-to-teach students. *Journal of Educational Research*, 88, 44-51.
- Tucker, C. M. & Herman, K. C. (2002). Using culturally sensitive theories and research to meet the academic needs of low-income African American children. *American Psychologist*, 57, 762-773.
- Tucker, C. M., Zayco, R. A., Herman, K. C., Reinke, W. R., Trujillo, M. & Carraway, K. (2002). Teacher and child variables as predictors of academic engagement among African American children. *Psychology in the Schools*, 39, 477-488.
- Woolfolk, A. E. & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82, 81-91.
- Zimmerman, B. J. & Martinez-Pons, M. (1988). Construct validation of a strategy model of student self-regulated learning. *Journal of Educational Psychology*, 80, 284-290.