

1997 Abstracts

- **Longitudinal Study of the Parents as Teachers Program in Rural Missouri: Effects on Achievement Test Scores**

Kelly Dolles/ (Dr. Christopher Maglio)

In 1984 Parents as Teachers (PAT), a program centered on prevention and early childhood education from birth to three years, was implemented in the state of Missouri. The present study examined the longitudinal effects of participation in the PAT program as well as the longitudinal effects of participation in a trial developmental class (also implemented by PAT). Missouri Mastery and Achievement Test Scores of children in third through fifth grade were analyzed and compared to a control group of students not participating in PAT.

- **An Experimental Comparison of African-Americans' and Caucasians' Racist and Sexist Beliefs**

Henrietta A. Vaughn/ (Dr. Judi Misale)

This study investigated differences in the sensitivity of various groups to racism and sexism as measured by their endorsement of racist and sexist beliefs and practices, and it assessed the relationship between racism and sexism in terms of the forms they each currently take. In a completely crossed designed, African-American and Caucasian males and females completed a scale assessing either modern racist or modern sexist attitudes. Both scales contained the same items, altered to apply either to African-Americans or to women. The hypothesis of enhanced sensitivity as a function of membership in a targeted group received support; that is, subjects belonging to either or both of the target groups evidenced increased sensitivity to these discriminatory processes. African-Americans demonstrated less racist beliefs than Caucasians, but within each ethnic group neither differed as a function of gender. Male African-Americans and female African-Americans displayed equal sensitivity to sexist issues, and both of these groups were reliably less sexist in their responses than Caucasians, although Caucasian females exhibited significantly less sexist attitudes than Caucasian males. Results also suggest parallels between target groups on issues with illicit discrimination.

- **Determinants of Health Promotion Behaviors in the Rural Elderly**

Sandra S. Aguillon/ (Dr. Ranjita Misra)

The purpose of this research was to examine the predictors of health promotion behaviors in a sample of exercising and non-exercising rural elderly using Pender's Health Promotion Model. Data was collected using a cross sectional survey design. The dependent variable was the health promotion behaviors and the independent variables were those suggested by the Health Promotion Model. The study population was drawn from several rural counties in Missouri and Iowa. The sample was comprised of 184 subjects: 114 exercising and 70 non-exercising elderly. Information was elicited by personal interviews. A majority of the respondents were females, married and unemployed. Measures included cognitive-perceptual factors like perceived health status, self-esteem and perceived self-efficacy, modifying factors consisting of demographics, and participation in health-promoting behaviors like exercise, nutrition, interpersonal support, health responsibility and stress management. Results indicated significant differences existed between the exercisers and non-exercisers on the health promotive behaviors. Exercisers were younger, more educated, had a higher self-esteem, higher internal locus of control, and more positive health perceptions than non-exercisers. In conclusion, elderly people who exercised had higher health promotion lifestyle scores and were associated with higher self-esteem, internal locus of control, perceived good health status, and higher income than non-exercisers. These findings support Pender's Health Promotion Model.

- **Identification and Characterization of an Activator of Gene Expression in *Staphylococcus epidermidis***

Kimberly Williams/ (Dr. Neal Chamberlain)

Staphylococcus epidermidis (*S. epidermidis*) is one of the three major disease causing bacteria in the hospital. The largest contributor to the increase in nosocomial bacteremia during the past decade was *S. epidermidis*, with a 754 percent increase observed in large teaching hospitals and similar but smaller increases documented in all other types of hospitals. A number of extracellular proteins such as fatty acid modifying enzyme (FAME) are produced by *S. epidermidis* and are important in protecting the organism after infecting the host. The purpose of this project was to confirm the discovery of a factor that informs the organisms when expression of extracellular proteins is necessary (activator). This activator increases the production of FAME and induces production of the enzyme earlier in the growth cycle (early log phase vs. early stationary phase). We also determined that the activator is heat resistant (100° C, 10 min). Addition of activator is directly proportional to the increase in FAME expression by *S. epidermidis*. However, the dose response curve plateaus if more than 370 µl of activator is added. In conclusion we believe *Staphylococcus epidermidis* produces an activator that induces FAME production and may induce expression of other extracellular. In the future the organism will undergo several microbiological manipulations to further characterize and purify the autocrine.

- **Curricular Integration of Computers in Graduate Communication Disorders Programs**

Jennifer Walz/ (Dr. Paula S. Cochran)

In the past decade dramatic changes have occurred in the technology available for persons with communication impairments. A study in 1987 examined both the use and planned goals for integration of computers in university communication disorders training programs. Results suggested that the reality was far from the ideal (Lorendo, 1988). The current project updates the Lorendo study of nationally accredited graduate programs in communication disorders. Program directors from 88 universities responded to a survey about current versus ideal computer utilization. Results suggest that although increased use in nearly every aspect of instructional and clinical service delivery has occurred, the factors which influence computer integration have remained constant over the past decade.

- **The Impact the Race of a Hypothetical Criminal Defendant and the Race of Subjects Have on the Rendering of Verdicts and Sentences**

Darnella LeShea Williams and Michelle L. McClure/ (Dr. C. Ray Barrow)

African-Americans are grossly overrepresented in the prison population. Although they make up only 11% of the United States population, they constitute 50% of the prison population. This is an obvious

overrepresentation of the general African-American population. This disparity may cause one to wonder whether racial discrimination plays a role in the sentencing of African-Americans. This study tested the belief stated above by distributing questionnaires to 96 selected subjects. The subjects consisted of 29 black and 67 white students of Truman State University. Each subject received a description of a court case in which a male defendant was being tried for robbery. The evidence against him, the defense, and the instructions by the judge to a jury were presented to subjects who were asked to pretend they were members of a jury and deliver a verdict and sentence. The questionnaire which followed the description of the court case gave subjects several response options: 1) not guilty; 2) guilty, of first degree or second degree robbery; 3) if guilty, what punishment should be recommended. Only the race of the defendant varied. Some subjects were asked to render a verdict for a white defendant and others for a black defendant. Analysis of the data failed to support the hypothesis. Possible reasons for this are discussed.

- **British Policy in the Gold Coast 1884-1914**

Timothy Kyle Plackmeier/ (Dr. John Ramsbottom)

What was the British policy in the Gold Coast Colony between the years 1884 and 1914? How did this policy change and what were the causes of these changes? Scholars have postulated that economics, competition with rival European colonial powers, and the interaction with the native population fueled change. By examining official dispatches between the Gold Coast administration and London, Parliamentary debates, and contemporary newspaper reports, this paper intends to illustrate that the three aforementioned causes all affected British colonial policy, although in different degrees at different times.

- **The Effects of Adolescent Relationships on Adult Social Competence**

Heather D. McMullen/ (Dr. Terry Palmer)

130 college students answered a questionnaire which addressed their adolescent peer and parental relationships, their adolescent social competence, and their present adult social competence. Individual's adolescent peer and parental relationships were found to affect their ability to achieve social competence in adulthood. A significant relationship between the subject's level of social skills in adolescence and their willingness to exhibit personality characteristics indicative of social competence in adulthood was also found. The extent to which an adolescent interacted in large peer groups positively correlated with all four areas of adult social competence, leadership $r(130) = .20, p < .03$; popularity $r(130) = .41, p < .0001$; extroversion $r(130) = .48, p < .0001$ and level of comfort $r(130) = .20, p < .02$. In contrast, the extent to which an adolescent interacted with a close friend failed to correlate with any of these four areas. In addition, the mother-adolescent relationship was positively correlated with both popularity $r(130) = .29, p < .001$ and extroversion $r(130) = .17, p < .05$, but had no correlation with leadership or level of comfort. The father-adolescent relationship positively correlated with popularity $r(130) = .19, p < .04$, leadership $r(130) = .19, p < .03$, and extroversion $r(130) = .20, p < .02$ but did not correlate with level of comfort.

- **Perceptions of Body Image and Body Satisfaction in Adolescent and College Women**

Tamala Stallings/ (Dr. Michele Breault)

Research suggests that negative body images and body dissatisfaction can prove to be detrimental to the development of a healthy self-esteem. Because previous research mainly focused on white females ranging in ages from 13 to 25, this research expanded the population to include African-American college-aged and adolescent females. Using the Rosenberg Self-Esteem Scale, Strunkard, Sorenson, and Schulsinger body image scale, and Bornhstedt Body Parts Satisfaction scale, subjects were measured on levels of self-esteem, real and ideal body image, and body part satisfaction respectively. Target subjects varied in ethnicity (African-American/Caucasian), and age (13-19 yrs./20-23 yrs.). Because media images portraying the ideal Caucasian female as being unnaturally thin and the lack of African-American images of beauty, a number of hypotheses were tested using the three scales previously mentioned. As hypothesized African-American females, both college-aged and adolescents, preferred a heavier body image and experienced greater levels of body satisfaction than their Caucasian counterparts. Contrary to the hypothesis, there were no significant levels of self esteem in African-American or Caucasian college-aged and adolescent females.