The Role of Ethnicity and Grade Level on the Motivational Orientation in Urban African American Middle School Students

Cheryl B. Warner
Clemson University

This study's purpose was to pair motivational orientation and ethnicity in a sample of urban African American middle school students (n = 213). Through multivariate analyses, the results revealed differences in motivational orientation between eighth graders when compared to their younger peers. The study supports the hypotheses of: a) the flexibility of motivational orientation; b) the declining interests and increased self-evaluation and satisfaction in students, and; c) the impact of ethnic pride on students' motivation. Implications of the findings and recommendations for future research are discussed.

American Middle School Students

The achievement gap between African American students and their White counterparts narrowed during the 1970s and 1980s but plateau during the 1990s. Although African American students' achievement scores have improved in recent years, they continue to trail the achievement level of White students. They have the second highest dropout rate for 16-year-olds through 24-year-olds, following Latino students. The lower performance of African American students, or the achievement question, is particularly perplexing since their enthusiasm for learning match their White peers during the early elementary years, but decline as African American students' progress through the middle school grades (Tyson, 2002).

Comparative studies on academic achievement across ethnic groups found cultural differences contribute to academic achievement (Bempechat, Graham, & Jimenez, 1999; Chen, Stevenson, Hayward, & Burgess, 1995; Steinberg, Dornbusch, & Brown, 1992). African American students tended to report higher self-satisfaction, inflated self-reported grades, ethnic pride, and optimism about their futures regardless of their academic standing, limited peer support, enrollment at private or public schools, or negative stereotyping of their ethnic group (Chen et al., 1995; Steinberg et al., 1992). Questions of what motivates and sustains African American students throughout

their educational years, despite their national ranking in academic achievement and negative perceptions about Black culture continue to perplex educators and researchers. Understanding motivational orientation in African American students will contribute to the phenomenological knowledge of personal and academic development in African American youth.

Theoretical Foundation

Motivational orientation addresses the question of why one learns (Harter, 1980). Motivational orientation, once believed to be a stable, trait-like disposition, is now defined as a malleable and situational learning condition that exists on a continuum between extrinsic motivation and intrinsic motivation (Harter 1980; Harter & Jackson, 1992; Harter, Whitesell, & Kowalski, 1992). Through their research, Harter and colleagues (Harter, 1980; Harter & Jackson, 1992) concluded students: a) are simultaneously intrinsically and extrinsically motivated; and b) shift from one motivational orientation to another to adapt to varying class subjects or classroom environments. Self-determination theory stressed the flexibility and continuum of motivation (Deci, Vallerand, Pelletier, & Ryan, 1991; Lepper, Corpus, & Iyenger, 2005; Ryan & Deci, 2000). Self-determination theorists emphasize the coexistence of extrinsic-intrinsic motivation and promote optimal learning as occurring when the learner relies less on external incentives and more on internal incentives (e.g., self-interest, competence, relatedness, or autonomy) that direct self-regulated or self-initiated learning behaviors (Deci et al., 1991; Ryan & Deci, 2000). Unfortunately, Ryan and Deci (2000) believed school settings fail to create environments for intrinsically-based learning, "Given that many of the educational activities prescribed in schools are not designed to be intrinsically interesting, a central question concerns how to motivate students to value and self-regulate such activities, and without external pressure, to carry them out on their own." (p. 60).

Other variables, such as racial identity, cultural worldview, beliefs about intelligence, the perception of the relationship between academic achievement and adult success, self-efficacy, and self-confidence, also influence students' motivational orientation (Lepper et al., 2005; Wong, Wiest, & Cusick, 2002). Certain researchers attempted to identify key factors that affect how African American children learn, dispelling the

136

myth that African American elementary and middle school students differed from White students in academic achievement because they are extrinsically motivated. Researchers studies revealed African American students are motivated by their: a) interests in assigned tasks; b) preference for "high variability" tasks over low variability tasks; c) preference for learning environments that emphasized competence or mastery goals and are supportive of their racial identity development; and d) positive perceptions of their learning environments (Bailey & Boykin, 2001; Banks, McQuater, & Sonne, 1995; Kaplan & Maehr, 1999).

Early adolescence is a critical developmental stage for youth in general, but especially for ethnic minority youth (Quintana, 1998). African American youth receive numerous messages and images about their ethnicity from their families, communities, and society that socializes youth on the expected community norms, the instillation of racial/ethnic pride, and coping strategies for managing racism and adverse life situations (Hughes & Demo, 1989). Researchers concluded that African American youth internalize these messages as they mature, creating a framework of perceptions about self, others, and the world (Frabutt, Walker, & MacKinnon-Lewis, 2002; Plummer, 1995; Spencer & Markstrom-Adams, 1990). Ethnic pride, the feelings associated in identifying with one's ethnic group, contributes to resiliency, higher self-concept, and sense of competence, academic achievement and engagement, better relationships with family and peers, and career efficaciousness (McMahan & Watts, 2002; Whaley, 1993). Positive ethnic socialization offsets the negative effects of racism, reduces adverse environmental risk factors for African American adolescents and, over the long-term, contributes to the survival of successful African American professionals (Frabutt et al., 2002; Hamm, 2001; Hughes & Demo, 1989; Smith, Atkins, & Connell, 2003; Spencer, Fegley, & Harpalani, 2003; Stevenson, McNeil, Herrero-Taylor, & Davis, 2005; Vazsonyi, Pickering, & Bolland, 2006; Whaley, 1993).

Both ethnicity and motivational orientation include an internalizing, psychological process of constructing, reconfiguring, and absorbing external stimuli into personal, self-regulated, or self-defined systems of attitudes and behaviors. These processes intersect during early adolescence when self-identification is critical. Chen et al. (1995) discussed that exploring values and belief systems would provide greater understanding of how culture—specifically, ethnicity —affects

motivational orientation. Few studies have focused on the motivational orientation of African American students as a factor of their academic achievement. Even fewer studies have paired the constructs of ethnicity and motivational orientation to determine their effects on the development on African American youth (Bailey & Boykin, 2001; Banks et al., 1995; Lepper et al., 2005; Shahar, Henrich, Blatt, Ryan, & Little, 2003; Tyson, 2002).

Purpose

This study acknowledges the middle school years are full of psychological and educational changes that potentially affect the internalization of ethnicity and academic motivation in African American youth. The purpose of this study was to investigate if: a) Does students' motivational orientation reflect fluidity and flexibility, or stable, trait-like characteristics?; b) Are there significant intragroup differences based on grade level and sex on ethnicity and motivational orientation measures?; c) Do the students experience a significant shift in motivational orientation as they progress through the middle grades?; and d) Does ethnicity affect the directionality of the students' motivational orientation?

Methodology

Participants

Six public, K-8 schools located in a large, Midwestern city participated in the study. Five participating schools reported a student body of over 99% African Americans. The 6th school reported a majority ethnic minority student body, which 18.5% were African Americans and the remaining were of Asian descent (47%), Hispanic descent (15.8%), and European or White descent (19%). At least 87% of the schools' enrollment received subsidized lunches. The sample included 213 African American students, 62 sixth-graders, 62 seventh-graders, and 89 eighth-graders. 44% of the students were males. The average ages of the students by grade level were 11.87 for sixth-graders, 12.83 for seventh-graders, and 13.75 for eighth-graders.

Instruments

The Intrinsic versus Extrinsic Orientation in the Classroom Scale (Harter, 1980) is a 30-item, 5-subcale instrument that measures motivational orientation along a continuum of intrinsic and extrinsic poles. Three of the subscales measures the directionality of motivation: a) Preference for Challenge (PC) measures one's preference for

138

challenging or easier work; b) Curiosity/Interest (CI) measures the extent one learns based upon one's own interests or to satisfy the teacher and receive good grades; and c) Independent Mastery (IM) measures one's preference to figure out solutions to problems or to seek assistance from teachers. The remaining subscales measure a student's level of competence in making school-related decisions: a) Independent Judgment (IJ) measures a student's ability to be self-directed in knowing what to do academically or primarily to rely on teachers' directions; and b) Internal Criteria (IC) measures whether the student is capable of knowing his/her success or failure on assignments or tests or needs external feedback to evaluate his or her work. Higher scores indicate movement toward the intrinsic pole; whereas, lower scores indicate movement towards the extrinsic pole of motivation. Scores that fall around the mean indicate flexibility in moving along the continuum of intrinsic-extrinsic motivation (Harter et al., 1992). The Kuder-Richardson Formula 20 reliability coefficients are .78 to .84 (PC), .68 to .82 (IM), .70 to .78 (CI), .72 to .81 (IJ), and .75 to .83 (IC) (Harter, 1980).

The Ethnicity Questionnaire replicated from Phelps and Day (1992) is a 24-item, 3-subscale instrument that measures three dimensions of ethnicity. The subscales are: a) Ethnic Pride (EP) measures the knowledge and understanding of one's ethnic group and feelings about being a member of one's ethnic group; b) Ethnic Worry (EW) measures the concern and apprehension of being scrutinized due to one's ethnicity; and c) Ethnic Discrimination (ED) measures recognition of differential treatment based on ethnicity. Scores can be interpreted using either the subscales or the full-scale score. Internal consistency reliability coefficients were Full scale ($\alpha = .53$), EP ($\alpha = .71$), EW ($\alpha = .70$), and ED ($\alpha = .59$). Since the full scale and ED had alpha coefficients of less than .60, only EP and EW were included in the final analyses.

Procedure

The individual assessments and demographic questions were combined into one complete survey. Passive consent procedures were recommended and followed by three of the participating schools and approved by our Institutional Review Board. Consent forms and letters to parents outlining the purpose of the study were distributed to students through their classroom teachers. Data collection occurred during the spring term following the weeks of spring break and standardized

139

achievement testing. Students were given one class period (40 minutes) to complete the survey; therefore, proctors (all of whom were African Americans) were used to collect data from several classrooms concurrently and read aloud the directions and survey items to the students to control for variability in students' reading skills and assist students in completing the survey within the allotted time.

Statistical analysis

Multivariate of covariates and multiple regression analyses tested the research questions. To control for variation in school environments, which may potentially confound the dependent measures, we included a school categorical variable. Frequency counts revealed that three schools yielded large enough sample sized to be included in the analyses. The remaining schools ($n = 21$) were removed from the analyses, reducing the sample size to 192 students. School 1 and School 2 were predominantly African American schools. Participants from School 3 were from the school where African American students represented less than 19% of the student body. The schools and grade level were coded as dummy variables to represent two levels for each variable: a) School 1 compared to Schools 2 and 3 (School 1) and School 3 compared to Schools 1 and 2 (School 3); and b) 6th graders compared to 7th and 8th eighth graders (Grade 6) and 8th graders compared to 6th and 7th graders (Grade 8). We determined motivational orientation mean scores: a) within ±1 *SD* of the subscale means indicated flexible motivational orientation; b) greater than 1 *SD* above the means as, intrinsic motivation; and c) lower than 1 SD below the means as extrinsic motivation. The motivational orientation subscales were the dependent or criterion variables, while the predictor or independent variables included EP and EW subscales, school, grade levels, and sex.

Results

A power analysis confirmed the robustness of the overall analysis, even with the reduction of participants, reflecting a power ratio of .80 for a medium effect size (.15) at a significance criterion of .05 (Cohen, 1992). At least 67% of the students fell within ±1 *SD* of the motivational orientation mean scores; indicating flexibility in students' motivational orientation (Table 1). A MANOVA analysis revealed a main effect for Grade 8 ($F(7, 177) = 2.32$, $p < .05$) on CI ($F(1,

183) $= 8.51$, $p < .01$) and IJ ($F(1, 183) = 5.10$, $p < .05$. To determine the changes in motivational orientation shifts across the grades, we compared the means differences on the CI and IJ means between Grade 8 and the lower grades. An one-way ANOVA indicated the eighth graders report lower CI scores ($F(1, 191) = 8.52$, $p < .01$) and higher IJ scores ($F(1, 191) = 4.33$, $p < .05$) than their younger peers. Separate multiple regression analyses tested the criterion variables' relationships with the predictive variables. Three motivational orientation subscales emerged as significant regression models: (a) The CI model ($F(7, 183) = 2.11$, $p < .05$; $R^2 = .08$) with Grade 8 ($\beta = -.26$, $p < .01$) and EP ($\beta = .16$, $p < .05$) as significant factors; (b) the IJ model ($F(7, 183) = 4.48$, $p < .000$; $R^2 = .15$) with Grade 6 ($\beta = -.19$, $p < .05$) and Grade 8 ($\beta = .18$, $p < .05$); and (c) the IC model ($F(7, 183) = 2.43$, $p < .05$; $R^2 = .09$) with EP ($\beta = .18$, $p < .05$) as its sole factor (Table 2). In conclusion, the analyses required the rejection of the null hypothesis for each of the research questions. The results reflected (a) flexible motivational orientation for at least two-thirds of the sample as indicated by their MO subscale scores falling within one standard deviation from the MO subscale means, (b) changes in the levels of CI and IJ for eighth graders, and (c) the effects of EP on CI and IC regression models.

Table 1

Means and Standard Deviations, Percentages of Students per Level, and Confidence Levels for Eighth Graders when Compared to Sixth and Seventh Graders per Motivational Orientation Subscales (n = 192)

	Total		Levels (Percentages)			95% Confidence Intervals for Means between the Eighth Graders as compared to the Sixth and Seventh Graders	
	M	*SD*	Extrinsic	Flexible	Intrinsic	6th and 7th	8th
PC	2.80	.67	14	68	19	2.59 – 2.89	2.74 – 2.95
CI	2.49	.53	13	73	14	2.49 – 2.68	2.26 – 2.46*
IM	2.65	.60	16	69	15	2.47 – 2.68	2.58 – 2.84
IJ	2.81	.63	17	68	15	2.53 – 2.76	2.88 – 3.09
IC	2.73	.67	16	68	16	2.55 – 2.78	2.70 – 2.96**

*, $p < .05$; ** $p < .01$

Table 2

Multiple Regression Models for the Motivational Orientation Subscales

Predictors	Models[a]				
	PC	CI	IM	IJ	IC
	Standardized β				
Ethnic Pride	.20**	.16*	.09	.06	.18*
Ethnic Worry	.09	.03	.06	-.06	.03
Sex	-.04	-.04	-.01	.01	-.001
Grade Levels					
6th over 7th and 8th	-.11	-.06	-.15	-.19*	-.12
8th over 6th and 7th	-.11	-.26**	.04	.18*	.06
School Levels					
#1 over #2 and #3	.15	-.05	.01	-.16	-.13
#3 over #1 and #2	.11	-.06	.05	-.15	.03
F	1.91	2.11	1.21	4.48	2.43
p	.07 (*ns*)	.05	.30(*ns*)	.000	.02
R^2	.07	.08	.04	.15	.09

*$p < .05$, **$p < .01$, ***$p < .001$.

Discussion

The study paired motivational orientation and ethnicity in a sample of urban African American middle school students who lived and were schooled in predominantly African American environments. The statistical analyses supported our hypotheses and concurred with the results of other studies (Chen et al., 1995; Harter et al., 1992; Harter & Jackson, 1992; Lepper et al., 2005; Steinberg et al., 1992). The significance of these findings emphasized that African American students' motivational orientation is more flexible and malleable (neither extrinsic or intrinsic but may change due to academic subject, instructional environment and strategies, and student interest) than perceived, and slightly declines as they approach high school, and is affected by culture, more specifically ethnic pride. The 8th grade year appears to be a significant time of change for students as indicated by their reports of declining curiosity and interest in learning while simultaneously reporting greater academic competence than the 6th and 7th graders. This study questioned whether further investigations could determine whether the changes in students' curiosity relates to the

142

school curriculum or to an overall redirection of their interests to non-academic areas. Capturing this information is critical in determining effective intervention in re-engaging African American youth in formal education.

The transition between elementary and middle school is associated with changes in motivational orientation, compromising middle school students' sense of competence, learning skills, and motivation, creating school anxiety (Harter et al., 1992). The participants, enrolled in K–8 schools, remain in the same physical school environment for their middle school years. This differs from students who change schools for the middle grades. Remaining in the same school may insulate the younger middle school students from the transitional stress associated with changing educational environments. Additionally, the timing of the data collection may have affected our results. Data collection occurred late in the school year, after spring break and standardized testing. This research suspected that 8th graders may have been looking ahead to their pending graduation, summer vacation, or, possibly, the start of high school. Feelings of restlessness could lead to less engagement in the school environment, a mindset that could temper their responses on the survey.

Participants reported similar levels of ethnic pride and ethnic worry. However, ethnicity, specifically ethnic pride, was significantly associated with students' motivational orientation. The benefits of ethnic pride on the overall development of African American youth and adults have already been established (Bailey & Boykin, 2001; Hughes & Demo, 1989; McMahon & Watts, 2002; Whaley, 1993). Furthermore, this research also postulated ethnic pride would emerge as a critical factor for the sample. The regression analyses showed it significantly associated with higher levels of curiosity or interest in learning for the younger students and with the ability of self-evaluation and satisfaction with academic work in the total sample. Self-determination Theory is an applicable theory to frame the results of this study. It argues optimal learning occurs when students redirect their reliance on external rewards to internal, psychological incentives of competence, relatedness, or autonomy. Allowing African American youth to engage in the learning process through self-regulated behaviors. The presence of self-evaluation and satisfaction illustrates the optimism found in African American students regardless of their declining interest or actual academic performance (Deci et al., 1991; Lepper et al., 2005;

Ryan & Deci, 2000). Assor and Connell (1992) highlighted the power of perceptions over the reality when they discovered students who overrated their grades were more likely to match their actual academic performance with their earlier self-perceptions within two years.

There are several limitations with this study; thus, the findings should be viewed with caution. The assessment surveys are unpublished instruments without comparative normative data on diverse samples. This research used the Intrinsic versus Extrinsic Motivational Orientation in the Classroom Scale, which has recently been modified by other researchers (Harter, 1980). The predictive variables that emerged from our regression analyses accounted for only a small portion of criterion variance. This fact may be disconcerting for some researchers; however, small variances are typical for ethnic identity studies (McMahon & Watts, 2002). As previously mentioned, the timing of data collection could have affected student responses. Student responses may have differed if data collection occurred during the fall semester. Finally, statistical analysis controlled for the variability in school environment, which may have contributed to the research results. We recommend including school environment measures in future studies.

Implications

Educators and educational leaders, mental health professionals, and youth development leaders behold the charge of helping parents and communities understand, educate, and encourage our youth during their critical years of academic and personal development. As this study showed that, for African American youth, and academic development is intertwined with their ethnicity. Ignoring or separating it from the academic arena creates a disservice to African American youth. Positive ethnic identity formulation, parental involvement, and connectedness to peer support, insulate African American students from the risks of academic failure, an unhealthy or difficult learning environment, and multiple risk factors (Gutman, Sameroff, & Eccles, 2002; Steinberg et al., 1992). The researchers believe creating environments for optimal learning in African American youth should allow developing youth to capitalize on the fluidity and flexibility of motivational orientation and the promotive properties of ethnic pride. Educational curricular and programs that combine external reinforcements and students' psychological needs have a greater chance of increasing and sustaining motivational levels while creating resiliency, engagement, and achievement in urban African American middle school students.

144

References

Assor, A., & Connell, J. P. (1992). The validity of students' self-reports as measures of performance affecting self-appraisals. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom*. Hillsdale, NJ: Lawrence Erlbaum.

Bailey, C. T., & Boykin, A. W. (2001). The role of task variability and home contextual factors in the academic performance and task motivation of African American elementary school children. *The Journal of Negro Education, 70*, 84-95.

Banks, W. C., McQuater, G. V., & Sonne, J. L. (1995). A deconstructive look at the myth of race and motivation. *The Journal of Negro Education, 64*, 307-325.

Bempechat, J., Graham, S. E., & Jimenez, N. V. (1999). The socialization of achievement in poor and minority students: A comparative study. *Journal of Cross-Cultural Psychology, 30*, 139-158.

Chen, C., Stevenson, H. W., Hayward, C., & Burgess, S. (1995). Culture and academic achievement: Ethnic and cross-national differences. In M. L. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement*. Greenwich, CT: JAI Press.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist, 26*, 325-346.

Frabutt, J. M., Walker, A. M., & MacKinnon-Lewis, C. (2002). Racial socialization messages and the quality of mother/child interactions in African American families. *Journal of Early Adolescence, 22*, 200-217.

Gutman, L. M., Sameroff, A. J., & Eccles, J. S. (2002). The academic achievement of African American students during early adolescence: An examination of multiple risk, promotive, and protective factors. *American Journal of Community Psychology, 30*, 367-399.

Hamm, J. V. (2001). Barriers and bridges to positive cross-ethnic relations: African American and White parent socialization beliefs and practices. *Youth & Society, 33*, 62-98.

Harter, S. (1980). *A scale of Intrinsic versus extrinsic orientation in the*

145

classroom (manual). University of Denver, CO.

Harter, S., & Jackson, B. K. (1992). Trait vs. nontrait conceptualization of intrinsic/extrinsic motivational orientation. *Motivation and Emotion, 16*, 209-230.

Harter, S., Whitesell, N. R., & Kowalski, P. (1992). Individual differences in the effects of educational transitions on young adolescents' perceptions of competence and motivational orientation. *American Educational Research Journal, 29*, 777-807.

Hughes, M., & Demo, D. H. (1989). Self–perceptions of Black Americans: Self–esteem and personal efficacy. *American Journal of Sociology, 95*, 132–159.

Kaplan, A., & Maehr, M. L. (1999). Enhancing the motivation of African American students: An achievement goal theory perspective. *The Journal of Negro Education, 68*, 23-41.

Lepper, M. R., Corpus, J. H., & Iyenger, S. S. (2005). Intrinsic and extrinsic motivational orientation in the classroom: Age difference and academic correlates. *Journal of Educational Psychology, 97*, 184-196.

McMahon, S. D., & Watts, R. J. (2002). Ethnic identity in urban African American youth: Exploring links with self-worth, aggression, and other psychosocial variables. *Journal of Community Psychology, 30*, 411-431.

Phelps, R. E., & Day, J. D. (1992). *Ethnicity-related self-esteem and worry: Development of a scale*. Unpublished manuscript, The University of Georgia, Athens, GA.

Plummer, D. L. (1995). Patterns of racial identity development of African American adolescent males and females. Journal of Black Psychology, 21, 168-180.

Quintana, S. M. (1998). Children's developmental understanding of ethnicity and race. *Applied & Preventive Psychology, 7*, 27-45.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivation: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67.

Shahar, G., Henrich, C. C., Blatt, S. J., Ryan, R., & Little, T. D. (2003). Interpersonal relatedness, self-definition, and their motivational orientation during adolescence: A theoretical and empirical integration. *Developmental Psychology, 39*, 470-483.

Smith, E. P., Atkins, J. & Connell, C. A. (2003). Family, school, and community factors and relationships. *American Journal of*

Community Psychology, 32, 159-173.

Spencer, M. B., Fegley, S. G., & Harpalani, V. (2003). A theoretical and empirical examination of identity as coping: Linking coping resources to the self processes of African American youth. *Applied Developmental Science, 7*, 181-188.

Spencer, M. B., & Markstrom-Adams, C. (1990). Identity processes among racial and ethnic minority children in American. *Child Development, 61*, 290-310.

Steinberg, L., Dornbusch, S., M., & Brown, B. B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. *American Psychologist, 47*, 723-729.

Stevenson, H. C., McNeil, J. D., Herrero-Taylor, T., & Davis, G. Y. (2005). Influence of perceived neighborhood diversity and racism experience on the racial socialization of Black youth. *Journal of Black Psychology, 31*, 273-290.

Tyson, K. (2002). Weighing in: Elementary-aged students and the debate on attitudes toward school among Black students. *Social Forces, 80*, 1157-1189.

Vazsonyi, A. T., Pickering, L. E., & Bolland, J. M. (2006). Growing up in a dangerous developmental milieu: The effects of parenting processes on adjustment in inner-city African American adolescents. *Journal of Community Psychology, 34*, 47-73.

Whaley, A. L. (1993). Self-esteem, cultural identity, and psychosocial adjustment in African American children. *Journal of Black Psychology, 19*, 406-422.

Wong, E. H., Wiest, D. J., & Cusick, L. B. (2002). Perceptions of autonomy support, parent attachment, competence and self-worth as predictors of motivational orientation and academic achievement: An examination of sixth- and ninth-grade regular education students. *Adolescence, 37*, 255-266.

147