

THE EFFECTS OF DANCE ON ADOLESCENTS' PSYCHOSOCIAL DEVELOPMENT

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This study examined the effect of dance on the psychosocial development of adolescents. Specifically, this study explored whether participation in an expressive dance class, commonly known as "Hip-Hop", influences adolescents' academic self-concept, motivation, body-image perception and social competence. Forty-three low-income adolescents attending a recreation center for either a dance class or non-dance activity were selected to participate in the study. Over a four-week period, participants in the dance and non-dance activity groups were observed, videotaped, and administered a self-report questionnaire assessing academic self-esteem, motivation, body-image perception, attitudes toward dance, and ethnic identity. Responses from the questionnaire were analyzed and compared between the two groups. Results showed significant differences on outcome measures between dance and non-dance groups across gender and ethnicity. It is hoped that results from this study will support the use of dance as an effective tool to improve the psychosocial development of adolescents.

Adolescence is commonly characterized as a period during which many struggle with issues surrounding academic motivation, perception of body image, social competency and ethnic identity. These struggles are even more difficult for adolescents from ethnic minority backgrounds. For example, research findings consistently indicate that social competency and educational outcomes of African American adolescents are not as positive as the outcomes are for other ethnic groups (Cole & Cole, 2001). Researchers believe that this decline is due in part to the transition from elementary school to junior high school, which confronts increased academic and social demands at the same time that it puts them at the bottom of the school social ladder (Cole & Cole, 2001). African Americans, particularly male adolescents are believed to suffer the most in this area due to their negative socialization in society. The demands that result from having to cope within the American social context are complex and inherently contradictory (Boykin, 2000).

In addition to these issues at the forefront of psychological research, there are many other problems arising that affect adolescents' health and development. According to the Healthy People Report from the National Institutes of Health and recent data from the National Center for Educational Statistics few adolescents participate in culturally meaningful activities that increase physical activity and other psychosocial skills (Healthy people, 2002; U.S. Department of Education, 2000). As a result there is an increase in overweight and obesity among adolescents and a preoccupation with body image among both males and females. Also, a decrease in academic motivation is observed especially for ethnic minorities and self-esteem and social competency skills need improvement. Majority of adolescents teens, regardless of race or gender do not have an outlet, such as after school activities or hobbies to turn to during the critical periods of the day when their parents are not home. This is mostly due to the lack of funding for after school programs. It is reasoned that participation in an activity that is culturally meaningful and provides a positive social outlet, such as dance, will provide increase in development of self-esteem, academic motivation and overall social competence. Given these issues, it is imperative for researchers to find more information on the type of activity that adolescents participate in and its impact on psychosocial and academic development.

Theoretical Framework

There are three theories that set the basis for this study: Sociocultural Theory, Ethnic Identity Theory, and Self Objectification theory. According to Sociocultural Theory an individual's understanding of the world is mediated through culture and society; furthermore a learner's performance on any task is depended upon the cultural familiarity of the context of that task (Lucariello, 2004). Ethnic Identity Theory states that the manner in which an individual shapes her sense of self is through a fundamental connection to an ethnic group, which involves attitudes and feelings towards membership, and attachment to that group. Moreover it includes knowledge of cultural characteristics along ideological and behavioral bases, which effect how an individual engages in life (Yeh & Hwang, 2000). Finally, Self Objectification Theory argues individuals engage in various forms of self-consciousness and self-monitoring of one's outward appearance based upon society's view of one self (Slater & Tiggemann, 2002). Taken together, these theories to provide a rational framework to investigate the effects of dance on adolescents' psychosocial development.

Literature Review

Previous research has examined these issues. In a study by Bartko & Eccles (2003), the authors examined participation of adolescents in constructive and organized activities and its relation to psychosocial indicators. Results indicated that adolescents' activity involvement was related to their psychological and behavioral functioning. The activities in this study consisted of 5 after school activities such as homework, television viewing, extracurricular activities, school groups and jobs; however it didn't address dance specifically as an activity that may have an effect on psychosocial outcomes in adolescents. The present study will be looking further into that effect. In another study which explored academic motivation and ethnic identity (Rowley et. al, 1998), a multi-dimensional model of racial identity was used to examine the relationship between racial identity, personal self esteem and academic motivation in African American college students and high school students. Results showed a significant relationship for racial centrality, personal self-esteem and academic motivation. It is unclear whether these findings would transfer to middle and high school students and is worth further exploration.

Madelyn Farr (1997) critically examined the possible benefits of dance in African American adolescents. She found that dance played a significant role in the lives of African Americans prior to their forced journey out of Africa and provides a form of coping, particularly under difficult circumstances. Some of the characteristics of the dances include call-response, which is verbal or physical contact with other individuals, improvisation that is spontaneous creation developed from and individual's feelings. Expression of emotion is a major aspect of dance and music performance in which rhythm, pitch, and sound are used to communicate feelings. Farr recommends dance forms such as hip hop, which is a favorite among black youth and improvisational interactive dance, singing and rapping to uncover underlying themes. The cultural background information given about the potential benefits of dance in African American adolescents will be used as measures to provide assessment of students in the present study.

Vicario & Chambliss (2001) examined dance education as an outlet for physical exercise and confidence booster among urban adolescent girls and found greater dance experience increased self-esteem and health outcomes. Vicario (2001) also investigated the benefits of dance education and self esteem on adolescent girls and found that 77% of the students felt as though it had improved their self-discipline, which is necessary in keeping to your school work. Girls who scored high on dance efficacy seemed to feel more attractive while dancing in addition to feeling more attractive at school. This research assessed the benefits of dance in regards to the girl's school experience. If the school experience is not enjoyable the effort to achieve academically can be decreased.

In a study which investigated body-image, Schooler et. al. (2004) argued that little attention to race was given in the literature on body image. Thus, the authors investigated the relationship between TV viewing and body image among black in white women. Ethnic Identity predicted healthier body image among black women and the contributions of viewing black-oriented programming. With this study as background to the present study we shall hope to see similar results in looking at adolescents and hope to find information of the effects on other ethnic groups.

The objective of this study is to examine the impact of dance as an after school activity on adolescents' psychosocial development and to explore ethnic and gender differences in adolescents activity choices. It is expected that significant differences will emerge among students who participate in the dance intervention and those who don't participate in the intervention. It is hypothesized that adolescents who participate in the dance activity group will score significantly higher than those in the non-dance activity group on psychosocial measures. Moreover, it is expected that significant differences will emerge between gender and ethnicity. It is also predicted that females will score significantly higher on measures of attitudes towards dance and body image and there will be a significant relationship between ethnic identity, academic motivation and body image. Additionally, it is hoped that results from this study will support the use of dance as an effective tool to improve the psychosocial development of adolescents.

Method

Participants

A sample of 43 low-income adolescents (48% African American, 21% Caucasian, 10% Hispanic, and 21 % other) attending a local San Diego recreation center were assessed on several psychosocial measures. Students either

participated in dance activity or a non-dance activity of their choice. Their ages ranged from 10- 17 years old and all members of the Spring Valley and Lakeside REC Club Teen Centers, which is a free after school center for teen, ages 10-17. Activities were held at the Spring Valley and Lakeside recreation rooms and dance studios.

Measures

Activity Involvement. The dance activity group, which is our experimental condition, consisted of a hip-hop dance class. Hip-hop takes its roots in traditional West African culture and encompasses percussive syncopation and low to the earth movement. Dance Activity involved instruction on rhythm and incorporating it with hip-hop movement. Twenty-two students (5 males and 17 females) participated in this group. The non-dance activity served as the control group and involved several non-real dance recreational activities. Some of the activities included playing pool, ping-pong, board games and Dance Dance Revolution, which is one of the most popular eye & foot coordination arcade and video game for teens. Twenty-one students (18 males and 3 females) participated in this group.

Indicators. Adolescents' involvement in dance and non-dance activities was assessed by asking teens to report their opinions on six areas: dance attitudes, academic motivation, body image, social competency, Child activity and Ethnic identity. Dance attitude Questionnaire (Sanderson, 2000) assessed feeling toward dance, music and movement. Academic motivation questionnaire (Ryan & Connell, 1989) consisted of four sub-scales of motivation, which assessed various reasons for an individual's academic drive and included compliance, enjoyment, knowledge and reward. The Child Activity questionnaire (Cole, 2001) measures students' preferences for various types of activities that , music, dance, and other forms of body movements such as gestures. The Social Competency questionnaire (Rotter, 1966) assessed internal and external locus of control as it related to social and academic content. The Body image questionnaire (McKinley & Hyde, 1996) measured students overall attitudes towards their body, society's standards of ideal body image and other perceptions about body types and weight. Multi-dimensional Inventory of Black Identity Questionnaire (MIBI, Sellers) and the Multi-group Ethnic Identity (Phinney, 1992) Questionnaire assessed individual's attitudes and feelings towards membership, values, and behaviors of one's ethnic group. The MIBI was designed specifically for African Americans. For each question, the responses were rated on a 5-point Likert-scale ranging from 1= strongly disagree and 5=strongly agree. The MIBI and Multi-group Ethnic Identity questionnaire were rated on a 7-point Likert-scale ranging from 1 = strongly disagree and 7 = strongly agree.

Procedure. As previously noted, our goal was to examine the effects of dance intervention on social skills development, self-concept, self-esteem and motivation to do well in school. In this study we used a quasi-experimental design. Participants attended the REC Club voluntarily and participated in either a Hip-Hop dance class or a non- dance activity for a period of 4 weeks. The hip-hop class was an hour and half long. Those who participated in the non-dance group came and went as they pleased during the open hours of the REC from 3-6pm. At the end of the 4-week period students completed the questionnaire measures.

Results

In looking for effects in type of activity (hip-hop vs. non dance activity) on psychosocial measures we observed several significant effects and correlations. Figure 1 shows a significant effect for type of activity on attitudes towards dance such that adolescents in the hip-hop group had significantly positive attitudes towards dance than the control group. Figure 2 shows there was significant effect for gender on attitudes toward dance such that females had significantly more positive attitudes towards dance than males. Figure 3 shows a significant effect for type of activity mediated by dance choice on body image such that students who preferred to play inside and play a computerized dance game (Dance Dance Revolution) scored significantly lower than those students who preferred to play outside and participate in a real dance class on body image scales. Tables 1 and 2 show effects for gender difference on play preferences such that more males preferred to play outside than females.

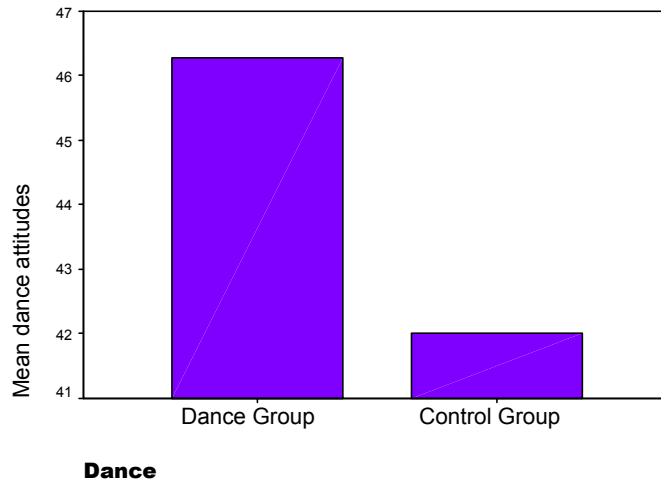


Figure 1. Mean differences for type of activity and attitudes towards dance.

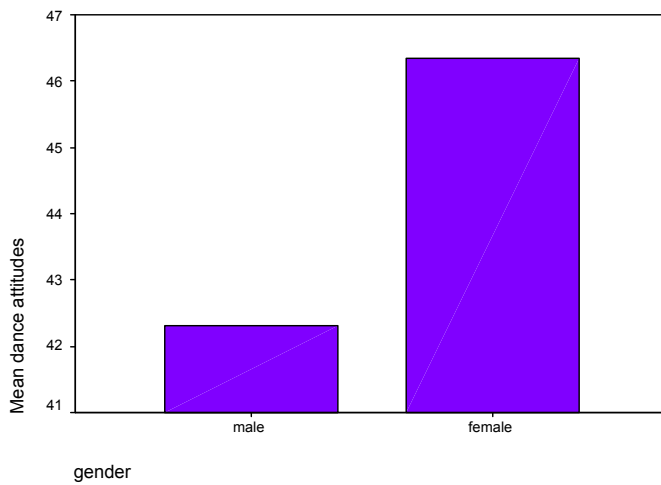


Figure 2. Mean differences for gender and attitudes towards dance.

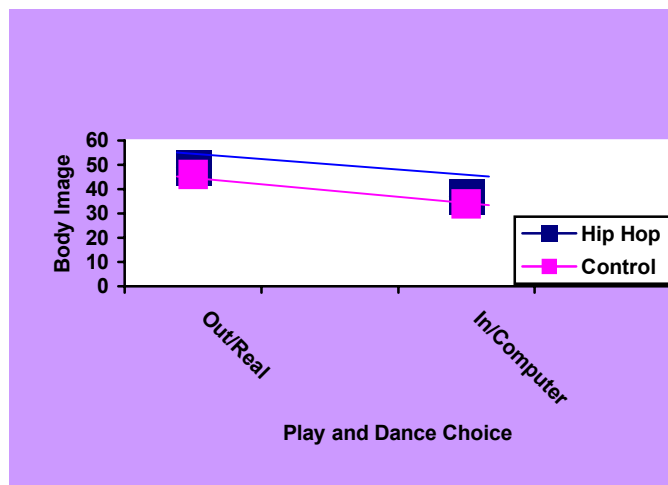


Figure 3. Effects for type of Activity mediated by dance choice on body image.

Table 1. Frequency table for males play choice

play choice for males

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	outside	13	56.5	68.4	68.4
	inside	6	26.1	31.6	100.0
	Total	19	82.6	100.0	
Missing	System	4	17.4		
Total		23	100.0		

Table 2. Frequency table for females play choice

play choice for females

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	outside	4	20.0	40.0	40.0
	inside	6	30.0	60.0	100.0
	Total	10	50.0	100.0	
Missing	System	10	50.0		
Total		20	100.0		

In order to explore the relationship between ethnic identification and body image a correlation analysis was performed. Illustrated in Table 3, a significant positive relationship emerged between African American adolescents ethnic identity assimilation subscale scores and perceived body image, such that the more adolescents identified ethnically with their own ethnic group the more positive the body image perception. This was not the case for non-African Americans.

Table 3. Correlation between ethnic identity and body image for African Americans

Correlations

		body image	multigroup ethnic identity measure	MIBI Assimilation
body image	Pearson Correlation	1	.378	.610*
	Sig. (2-tailed)	.	.183	.035
	N	43	14	12
multigroup ethnic identity measure	Pearson Correlation	.378	1	. ^a
	Sig. (2-tailed)	.183	.	.
	N	14	14	1
MIBI Assimilation	Pearson Correlation	.610*	. ^a	1
	Sig. (2-tailed)	.035	.	.
	N	12	1	12

*. Correlation is significant at the 0.05 level (2-tailed).

^a. Cannot be computed because at least one of the variables is constant.

Results on psychosocial outcomes show a significant relationship between ethnic identification and academic motivation. Table 4 shows a significant positive relationship was observed between ethnic identification and academic motivation (knowledge) for non-African American adolescents such that high ethnic identification of own ethnic group was associated with high academic motivation for knowledge sake.

Table 4. Correlation between ethnic identity and academic motivation for non-African Americans

		Correlations		
		multigroup ethnic identity measure	MIBI Assimilation	Academic attitude knowledge
multigroup ethnic identity measure	Pearson Correlation	1	. ^a	.549*
	Sig. (2-tailed)	.	.	.042
	N	14	1	14
MIBI Assimilation	Pearson Correlation	. ^a	1	.427
	Sig. (2-tailed)	.	.	.166
	N	1	12	12
Academic attitude knowledge	Pearson Correlation	.549*	.427	1
	Sig. (2-tailed)	.042	.166	.
	N	14	12	43

*. Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

In looking for ethnicity, grade and age differences, there were no main effects for these variables on psychosocial outcomes

Discussion

The most striking finding in this study was that adolescents who preferred to play inside and play the computerized game, Dance Dance Revolution, scored lower on body image scales than those who preferred to play outside and participate in a real dance class. This finding is representative of existing data which cites the rise in the number of adolescents who spend 4-5 hours a day watching television or other computerized game (Healthy People, 2002). This may account for the increase in overweight and obesity among adolescents today.

The finding of gender differences seen in play choice and dance attitudes was equally impressive. Females scored higher on dance attitude scales than males, however we also observed that more males preferred to play outside and females inside. Outside play generally affords more physical activity and exercise opportunities which are related to maintenance of healthy weight and overall good health. The fact that in this study more female preferred to play inside may somehow be related to the prevalence of eating disorders among females more so than in males. More empirical evidence is needed in order to draw definitive conclusions on this matter.

Equally striking and deserves to be highlighted is the obtained finding of a positive relationship between African American ethnic identity and body image. Many studies have previously confirmed the notion that African Americans tend have a healthier body image than most ethnic groups (Rosen et al, 1991). Also in dealing with ethnic identity findings there was a positive relationship between non-African American ethnic identity and knowledge. This finding also confirms what has been found in previous research about adolescents; Anglo-American adolescents in particular, score higher on academic scales and have been socialized to do well in academic settings. With there being a relationship between ethnic identity and academic motivation the more a student identifies with their ethnicity the more motivated they are to do well in school.

The limitations in this study are centered on the research design. First, this study lacked random assignment of the participants, which would balance prior experiences in the areas of dance and education in the experimental and control groups. Second, this study did not have gender and ethnic balance. An equal number of males and females as well as ethnic group members would have been useful in obtaining significant power in outcome measures. Third, the duration of the study may have hampered the effect of the activity. Each activity was given only over a 4-week period which is shorter than the standard dance classes at the recreation centers. However, a longer duration could have given a stronger effect in the differences observed. Future studies must consider increase the duration of the activity as well as implementing another dance form, such as ballet or modern dance, for comparison purposes.

These findings have powerful implications for adolescent health, development, and education. First, these findings suggest dance may be a viable component to add to existing educational curriculum to increase physical activity in a culturally meaningful way and improve academic outcomes. Furthermore, particular types of dance activity can enhance adolescents' body image perception and reduce eating disorders and other body image related

disturbances. The results from this study provide evidence that increase participation in computerized activities may hamper desired health and psychosocial outcomes during adolescence. Today, adolescents are engaging more of their time with video games and other computer technology simulated activities such that many researchers argue that it is severely affecting their academic performance and healthy behaviors (Eccles, 2002). Additionally, educators must consider ethnic identity and cultural factors when examining underlying factors in student's academic motivation. Research continues to document ethnic and cultural differences in academic motivation, and that Anglo and African American children are not simply motivated or unmotivated to achieve. There are different types of cultural factors which motivate adolescents to succeed academically. Findings from this study demonstrate this and links ethnic identification and motivation for knowledge with non-African American adolescents. Simply stated, African American students who strongly identify with their own ethnic group are driven academically for other reasons other than knowledge for knowledge sake, such as social and community responsibility (Boykin, 2000).

While the present study confirms the cultural and psychological importance of dance, further work is called for and should broaden the range of variables discussed above. It is hoped that this work will be continued and make significant contribution to literature on adolescent psychosocial development.

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