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Developing Intellectual, Social and Emotional Literacy Through Dance Education

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Author:

© Susan F. Graham

Institution

Auckland University of Technology

New Zealand

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ABSTRACT

The aim of this research project was to examine the effectiveness of an experiential dance intervention programme in enhancing the social, emotional, and intellectual development of adolescents. A multidisciplinary literature review indicated this aim could be met by focusing on a question that related to global self-esteem, selected facets of self-concept and a Social Partner Dancing Intervention Programme (SPDIP). The research question addressed in this investigation was; can a SPDIP contribute to a significant improvement in the global self-esteem and selected facets of self-concept level of secondary school adolescents? It was also hypothesized that; participants with initially 'Low' Global Self-esteem Group levels would be significantly changed. An intervention, switch and replicate ABACA design was selected to address the research question. The theoretical framework and the basis for the teaching and learning approach utilized was grounded in the interactional learning theories of (Bronfenbrenner 1979a) and (Vygotsky 1978). Global self-esteem and facets of self-concept were measured before and after a contrast or SPDIP via six administrations of Self-Description Questionnaire II (Marsh, 1988). Results of this investigation revealed that the intervention programme did not significantly alter the global self-esteem levels of the whole participant group. However it did find that the SPDIP supported a significant improvement in the verbal ability self-esteem of the sample population. It also supported the hypothesis at the .001 level.

Introduction:

A shy and withdrawn student starts to develop friendships with peers and a student with a history of behavioural problems begins to work in classes; these are the kinds of lasting emotional, social and intellectual learning many dance teachers claim to have facilitated. Anecdotally professional dance teachers link this learning (Graham 2002) to the expressive, social, physical and disciplined multi-dimensional experiences (Graham 2002) dance education offers. These teachers have also noted changes in students' confidence, self-esteem, personal growth, and ability to express ideas. Some teachers taking this approach to dance teaching have also made attempts to quantify the learning achieved and report on the progress of students in such programmes (Brooks Schmitz 1989); (Silk 1989); (Mako Freundlich, Pike et al. 1989); (Segal 1991); (Wheeler 1996). There is however little empirical research measuring and supporting dance teachers claims about the benefits of dance education.

Literature Review

An analysis of the changes reported by dance teachers' literature suggested that self-esteem is the most relevant overall construct including the emotional, social and intellectual learning many dance teachers claim to have facilitated. This conclusion led to the development of a research project measuring the relationship between a dance programme and self-esteem learning. Literature about self-esteem has suggested that; a low self-esteem level is a strong predictor of social, emotional and behavioural problems such as dropping out of school and other negative and risk-taking behaviours. It has also indicated that students with low self-esteem levels are less likely to form close relationships, be assertive and are generally more anxious (Leary, Schreindorfer et al. 1995). Findings such as those discussed have underpinned the 1999 Health and Physical Education and 2000 Arts curricula, which support dance education in New Zealand schools; both curricula list self-esteem enhancement as a learning outcome.

The 1999 Health and Physical Education Curriculum stating that students would:

analyse attitudes and values and take actions that contribute to their personal identity and self-worth. (In this document, 'personal identity and self-worth' includes ideas of self-concept, self-confidence and self-esteem p.8).

The 2000 Arts Curriculum indicating that dance promotes personal and social well-being by developing students self-esteem, social interactions and confidence in physical expression' (p.19). However the lack of a measurable definition of self-esteem in these curriculum documents led to a search for a more comprehensive definition of the self-esteem construct.

(Wells and Marwell 1976) suggested that self-esteem is the evaluative part of the self, a part of the whole self-concept. The whole self-concept includes all that one consciously knows about oneself, for example that one has brown hair and small feet without evaluating that information. The evaluative or self-esteem part of the self may then judge what is known, for example, I dislike my plain brown hair and I feel my small feet are attractive. This means that while self-esteem is a part of the self-concept and may be related to what the self-concept perceives, not all of what we know about ourselves is necessarily evaluated positively or negatively and therefore may not be influential on an individual's self-esteem level. Shavelson, Hubner et al. (1976) succeeded in defining self-concept, which includes self-esteem when he described it as an empirically measurable and observable part of this construct. He stated;

"seven features can be identified as critical to the construct definition. Self-concept may be described as: organised, multifaceted, hierarchical, stable, developmental, evaluative, differentiable"(p. 411).

Since its development, Shavelson's definition criteria have been tested, refined and strongly supported by research. The definition contributed to the formulation of a Hierarchical General Self Concept model that underpins a series of Self-Description Questionnaires Herbert Marsh has developed to measure self-concept and global self-esteem. Research using Marsh's Self-Description Scales (Marsh and Byrne 1989b); (Marsh and Gouvernet 1989c) supported the view that self-esteem and self-concept are separate and distinguishable constructs. Marsh's model accommodates 'global self-esteem' under the heading 'general self-concept' (Marsh, 1988).

The investigation conducted was grounded in a growing body of intervention method studies that have utilised Marsh's Self-Description Questionnaires (Marsh and Shavelson 1985a); (Marsh 1986a); (Marsh, Byrne et al. 1988a); (Marsh 1990a). A review of literature relating global self-esteem and dance has further indicated that several researchers had attempted to explore this relationship (Garrett 1993); (Graham 1994a); (Valentine-Garzon, Maynard et al. 1992). Results have been mixed, with some studies finding no link and others (Graham, 1997) suggesting global self-esteem levels have been enhanced by specific programmes.

(Hoge, Hanson et al. 1990) made an important contribution when they said of self-esteem development in schools that;

Influences were not constant from year to year, which suggests the importance of specific teachers and specific experiences... Both school climate and individual teachers have an impact on student self-esteem. Research on

classrooms has also consistently found higher self-esteem among students in classrooms that emphasise co-operation and student interdependence rather than individual competition (p.117).

The above quote summaries for self-esteem researchers that the prime variables in the changing of self-esteem levels in schools are teachers teaching approaches and the content matter taught. Both these variables were identified and controlled in the research conducted. It should also be noted that while self-esteem research is common in the Western world, it would be a mistake, to assume that this construct and its associated values are universally understood and accepted. A review of literature that examined the relationship of self-esteem and ethnicity suggested that understanding of this construct does not always transcend ethnic boundaries. A more comprehensive discussion of this issue is beyond the scope of this paper.

The relationship between self-esteem learning and literacy via dance education is examined in this paper. (Sinclair 1993) suggested there are two ways to define of the word literacy. The first states literacy is ‘an ability to read and write’ and the second that literacy is an ability to ‘use language proficiently’ (p. 667). The widely recognised first definition suggests literacy is an ability to interpret and record a language. The second definition suggests literacy is an ability to utilise a language well; both are relevant to the teaching practice of dance educators.

Dance teachers plan to develop the emotional, social and intellectual dimensions of their students through learning to read (interpret), create (develop and perform) and filming or notating (analyse and record) dance. That is, dance teachers aim to develop literacy via the communicative and physical language of dance, which they view as paralleling written and spoken languages. Many dance educators also view much of what they teach as transferable and supportive of conventional literacy and could provide anecdotal evidence of this.

Dance education programmes can facilitate literacy via the following experiences. Firstly they view the various dance techniques and forms that exist such as Paso Doble and Kapa Haka as languages similar to French and Cantonese. These dance forms hold a body of knowledge, history of a people and deep understandings of the worldview and philosophies of the cultures creating the dance form. Dance forms carry and express the essence of the people who created that dance technique or form and the knowledge and history are recorded through the dancers body. Secondly dance educators view the creation (choreography) of dance as an experience that requires the development and precise use of verbal language skills thus facilitating oral speech and interpersonal social skills. (Morrow and Smith 1989; Flood, Jensen et al. 1991) and (Davidson 1996) refer to oral language as an emergent behaviour that precedes the development of the conventional types of literacy. Their views are supported by the socio-cultural learning theory of Vygotsky (1978) and socio-ecological theory of Bronfenbrenner (1979).

Davidson (1996) also proposed that oral language is preceded by gross (large muscle group) physical activity and interactions by the students’ with their environment and others. The views and links made by Davidson, Sulzby (in Morrow & Smith; Flood, Jensen et. al.), Bronfenbrenner and Vygotsky all suggest a similar pattern in literacy development. They suggest literacy is stimulated by 1) interactions of a gross physical nature with ones environment and others, 2) these experiences are then converted into internal or external verbal language and finally 3) the concepts developed are reinforced and recorded through the more abstract mediums of reading and writing.

(Gardner 1993) 'multiple intelligences theory' suggested that students prefer to learn through one particular or combination of learning styles and associated media. Some students prefer quite abstract learning styles such as the intra-psychological learning style (which omits stages 1 and 2 in the literacy development stages posed above); other students perform best when all the stages in literacy development set out above are moved through in order.

The researcher's views are supported by (Fiske 2000) in the seminal 2000 the Arts Education Partnership and President's Committee on the Arts and Humanities book 'Champions of Change'. This book documents a number of significant research studies that identified the educational learning and developments facilitated through quality arts education programmes. These investigations were critical to the recognition of the unique role and contribution arts education programmes, including dance, make in the United States of America education system. Arts education is unique in its focus on development of the emotional dimension, the dimension wherein lies perseverance, passion, motivation, empathy and so many other qualities and skills essential to success in educational, relationship and other contexts.

This research paper endorses the view that art forms such as dance can be a powerful means of promoting conventional literacy through a) the interactive teaching approaches utilised in arts education b) the development of emotional and social skills that enable students to connect with themselves and others and by c) transforming the learning environment in a positive manner.

In the executive summary of the research studies Fiske's publication concludes that the arts:

1. 'reach students who are not otherwise being reached'
2. 'reach students in ways they are not otherwise being reached'
3. 'connect students to themselves and each other'
4. 'transform the environment for learning' and
5. 'provide new challenges for students already considered successful' (p.IX & X).

This researcher would suggest that many students fail to progress in line with their potential due to a lack of structured attention by teachers to the emotional and social dimensions of their students. This view was tested by the hypothesis posed in the investigation.

For the purposes of this investigation Hanna's definition of dance was adopted. (Hanna 1979) stated that;

'Dance can most usefully be defined as human behaviour composed, from the dancers' perspective, of (1) purposeful, (2) intentionally rhythmic, and, (3) culturally patterned sequences of, (4a) non-verbal body movements, (4b) other than ordinary motor activities, (4c) the motion having inherent and aesthetic value' (p. 19).

The definitions of social partner dancing utilised were those of Graham (1994b). (Graham 1994b) identified two different forms of SPD and defined them as follows. SPD was defined as "Rhythmical movements to music which are engaged in mainly for social purposes by an constant partnership" (p. 4). Social mixer dances were defined as "rhythmical movements to music that are engaged in for social purposes, in particular meeting people" (p. 4).

The research conducted aimed to gain insight into what variables might influence global self-esteem learning and to relate these findings to literacy development of students in dance

education programmes. The investigation reported here also begins to address many of the difficulties encountered in earlier studies and refine methodological issues that have emerged. The need for the investigation was supported by (Johnson and Bushkirk 1974) who stated that,

"although the potential mental health values cannot be disputed, actually the contributions of dance cannot be specifically stated without controlled studies and more studies with normal populations" (p. 413).

Research Question and Hypothesis

Can a SPDIP contribute to a significant improvement in the global self-esteem and selected facets of self-concept level of secondary school adolescents?

Hypothesis

That; students attending the intervention programme with the lowest ten- percent of global self-esteem scores will have their scores significantly improved by the ten session SPDIP.

Methodology

Participants

The sample for this investigation was selected from a target population that consisted of 119 year 9 and year 12 students attending a co-educational state secondary school in the Auckland, New Zealand metropolitan area. Aged between 12 and 18 years, the final group of participants with data eligible for analysis in the investigation included 83 students. The sample group was selected due to:

- a. its capacity to represent two age groups, this allowed age related trends in self-esteem to be examined.
- b. the school selected having a socio-economic and ethnically varied student population that reflected national norms.

The sample participating in the research project was grouped into 4 school classes; two of these classes had been classified by the school as being of high/average ability classes and the other two as low/average ability level. Participants from the four school classes were divided into ability matched experimental and contrast groups according to school-determined ability streamed groups. One high/average ability and one low/average ability class were randomly grouped together to make up the experimental group. The same procedure was used to create the contrast group required by this project.

Instruments and Protocols

The Self-Description Scale II (SDQ II) was used to measure global self-esteem and eleven self-concept facets according to the (Marsh 1988). Sub areas assessed included three areas of academic self-concept and seven areas of non-academic self-concept (physical ability, physical appearance, opposite sex relations, same sex relations, parent relations, honesty/trustworthiness, emotional stability, math, verbal, general school) and general self or global self-esteem. The co-efficient alpha estimate of reliability for each SDQ II scale varies from .83 to .91 (median = .87), average correlation among the factors is "modest" (mean $r = .18$) (Marsh 1990b). Participants responded to all 102 items in SDQ II by marking responses on a six point Likert Scale. The version of SDQ (II), used in this investigation was also especially designed and tested for the age groups selected.

Research Design

The overall research design selected was an intervention case study and involved a switching and replicating A B A C A design (Kratochwill and Levin 1992). It was selected as the best design to answer the question posed and was regarded as able to overcome methodological difficulties encountered in other intervention style studies reviewed. Participants from both groups were administered with SDQ II in the first and fourth weeks of the data collection programme to gather baseline data. In weeks 5 to 10 one group experienced the SPD intervention programme and the other the contrast programme (normal physical education programme). During weeks 11 and 14 both groups were again administered with SDQ II and attended regular physical education classes (no intervention or contrast programme). Between weeks 15 and 20 the intervention and contrast programme groups were switched and these groups experienced the programme not previously experienced. SDQII was then administered in both weeks 21 and 24. Measurements gathered data about three independent variables; age, gender, ethnicity; and dependent variables, global self-esteem and selected self-concept facets.

Intervention: Social Partner Dancing Programme

The SPDIP programme content included the teaching of three internationally recognised Dancesport social partner dances; namely, Rhythm Foxtrot, Modern Waltz and Rock'n'Roll/Jive. The experimental groups experienced ten, fifty-minute learning sessions, the final session being assessment focussed. The teaching approach and content material administered has been documented in detail in two video and book resource publications created and written by the researcher, (Graham 1994b; Graham 1994c). It is important to note that the programme teacher planned to develop the emotional, social and intellectual knowledge and skills of students through the SPDIP. As the teaching approach and/or the programme content may affect global self-esteem development, the teaching conditions and a student-centred approach guiding the teaching approach used in both the intervention and contrast programme. The teaching approach and its theoretical framework have been set out in detail in (Graham 2001).

Analysis of Data

This study examined changes in global self-esteem and the eleven facets of self-concept measured by SQD II were analysed by looking at group by programme interactions. Descriptive statistics and repeated measures ANOVA (Tabachnick and Fidell 1996) were used to analyse age, gender and ethnicity variables in relation to global self-esteem to see if there were any significant or marked changes in-group means over the 24-week study. Reliability of the pairs of measurements taken in periods between treatments were calculated and compared favourably with reliabilities reported by (Marsh, Byrne et al. 1988a).

Results

An answer to question one was found through administrations of Marsh's (1988) quantitative Self-Description Questionnaire II (SDQII) according to the pre-set design protocol. An initial analysis of all raw SDQ II data according to pre-set protocols meant that SDQ II data from 36 of the initial 119 participants had to be excluded from final analyses. Data was cleaned and descriptive statistics run. The sample size (n=83) was small and barely adequate for the statistical analyses utilised. The results that follow must therefore be interpreted with caution due to the limited sample size.

The mean, standard deviations and range for each facet were checked. Reliability was calculated using Cronbach's alpha reliabilities for each facet, for pairs of times and for

experimental and contrast groups. Facet scores in this investigation were compared favourably with those of Marsh (1988). In this investigation all participant scores for T1 and T2 were averaged as they were for T3 and T4 and for T5 and T6. This analysis indicated that reliabilities on facets achieved during this investigation compare favourably with those achieved by Marsh (1988). These averaged facet scores were utilised throughout the following analyses.

Selected baseline facet and total self-esteem (TOTSLF) data were analysed using analysis of variance with factors of gender, age (form), ethnicity and group using only main and three factor effects. Assumptions for analyses were also checked for normality, and equal covariance among grouping factor levels when running SPSS. Total self-esteem did not vary in terms of class, group, gender, ethnicity or age (form) at baseline. The results indicated that:

1. The older sixth form participants in this investigation had higher Physical Ability (4.84 compared to 4.08) and Opposite Sex self-esteem facet scores (4.96 compared to 3.83) than the third form participants
2. The sixth form participants had significantly higher global self-esteem levels than did the third formers (4.56 compared to 4.21)
3. The sixth form participants had significantly higher Same Sex self-esteem score at baseline (5.13) than the third form participants (4.58) and finally the initial contrast group (which included more sixth formers) had a score of 5.41 while the intervention group (with less sixth form participants in it) had a score of 4.60. The third form Physical Ability self-esteem score (4.10) was initially found to be significantly lower than that of the sixth form participants (4.84). The third formers Physical Ability self-esteem scores rose significantly to 4.44 after the intervention programme then declined to 4.09 after the contrast programme. These age related trends were similar to those previously reported by Marsh (1988).

The two ethnic groups measured (self-defined Pakeha and Maori) were found to have different patterns over time in relation to Physical Ability self-esteem. Maori participants measuring 4.04, 4.59 and 3.94 after the contrast programme. Pakeha participants scores were 4.14, 4.32 and then reverted to 4.21 after the contrast programme. While these patterns over time show similar general trends the patterns would suggest that the intervention programme was especially effective in enhancing the Physical Ability self-esteem of Maori students when compared with change achieved after the contrast programme. This result supports educational literature (Bishop and Glynn 2000) suggesting that Maori students achieve better in learning environments that are co-operative in focus. The marked decline in scores for Maori participants after the contrast programme would suggest that the impact of returning to 'regular classes and teaching approaches' had a significantly negative impact on the Physical ability self-esteem levels of Maori participants.

Verbal Ability self-esteem scores were found to significantly alter over time for the whole participant group. Measured scores show the baseline score of 3.76 significantly rose to 4.21 after the intervention programme and then declined back to 4.13 after the contrast programme. This result supports the view that the intervention programme developed the verbal ability self-esteem of participants in the investigation. Those participants who scored higher on Physical Ability self-esteem at baseline and began with a lower Verbal Ability self-esteem level made a more marked improvement in Verbal Ability than did participants with initially average or high self-esteem.

The above results are best explained by a combination of three factors. Firstly it is difficult to measure small changes in already high self-esteem scores for any of the facets measured and easier to measure significant changes when initial scores are low because there is more scope

for change. Secondly the number of Maori participants appears to have influenced these results in that the initial group with the most Maori participants was more likely to respond according to the pattern described for Maori participants over time and finally the initial group with the most sixth form participants was likely to show results that more closely resembled those found for this age group. Gender related results followed stereotypic patterns. Female participants had significantly lower Parent Relationship self-esteem scores (3.95) than did the male participants (4.89). This difference has frequently been explained (Marsh, 1988) as exhibiting societal sexism that places higher value on male members of society than on females, this preference or valuing more highly of males being reflected at a micro level in parent child relationships.

Results relating to the small 'low self-esteem' group (n=8) while they must be interpreted with caution due to the small sample size showed that the universal and significant positive change in Global self-esteem measured for this group over T1 to T2 and T3 to T4 occurred through positive changes to Physical Ability, Physical Appearance, Opposite Sex Relations, Verbal Ability and Total Self-concept self-esteem facets.

Discussion

In summary the answer to the research question (can a SPDIP contribute to a significant improvement in the global self-esteem and selected facets of self-concept level of secondary school students?) is that no significant changes in global self-esteem were measured for the total participant group. However Verbal Ability self-esteem scores were significantly improved by the SPDIP for the whole participant group. This result supports dance teachers claims that specified dance education programmes can support the development of social and emergent literacy skills such as verbal language which included intra and inter-personal interactions. Support for hypothesis; that students attending the intervention programme with the lowest ten-percent of global self-esteem scores will have their scores significantly improved by the ten sessions SPDIP was supported. While this result must be interpreted with due care due to the size of the 'low' self-esteem group (n= 8) this result is important for the following reasons. Firstly this result suggests that 'low' self-esteem students may prefer a teaching approach and content that moves through all three, dance education experience discussed earlier. Secondly this result suggests further investigations with a larger population of 'low' self-esteem participants may be justified on the strength of this exploratory research and finally this investigation provides a valuable stepping-stone on a pathway toward more robust research focussed on the dance sub-field of dance education.

While this investigation addressed an area of significant interest to dance teachers it may also have implications for teacher educators and teacher education programmes. This investigation draws attention to the importance and perhaps the primacy and value of the social and emotional dimensions in dance education programmes. The results highlight the need for further research into students' responses to various teaching approaches and arts curriculum content. The research also prompts further questioning. Is the value of the artist/teacher practitioner more than a theoretical ideal? Are not such teachers in practice essential if 'low' self-esteem students are to learn effectively in schools? Is not dance a vital content area, which utilises a unique teaching approach? Can dance education programmes facilitate literacy development?

References

- Bishop, R. and T. Glynn (2000). Culture Counts. Palmerston North, Dunmore Press.
- Bronfenbrenner, U. (1979a). The Ecology of Human Development. Cambridge, Harvard University Press.
- Brooks Schmitz, N. (1989). "Children with learning disabilities and the dance Movement class." Journal of Physical Education, Recreation and Dance **60**(9): 59-61.
- Davidson, J. (1996). Emergent Literacy and Dramatic Play in Early Education. New York, Delmar Publishers.
- Fiske, E. B., Ed. (2000). Chapmions of Change. Washington D.C., Arts Education Partnership President's Committee on the Arts and the Humanities.
- Flood, J., D. Jensen, et al., Eds. (1991). The handbook on researxch in the teaching of english language arts. NY, Macmillan.
- Gardner, H. (1993). Multiple Intelligences The Theory in Practice. New York, BasicBooks.
- Garrett, R. (1993). The influence of an educational dance program on female adolescent self-esteem, body image and physical fitness. XIIth Congress International Association for Physical Education and Sport For Girls and Women, Melbourne, Australian Catholic University.
- Graham, S. F. (1994a). A Quantitative Evaluation of the Effect of Movement and Dance on Self-esteem. Dance and the Child International Conference, Sydney, MacQuarie University.
- Graham, S. F. (1994b). A Beginners Guide to Ballroom Dancing. Dunedin, Otago Polytecnic Printery.
- Graham, S. F. (1994c). A Beginners Guide to Rockn"Roll Dancing. Dunedin, Otago Polytechnic Printery.
- Graham, S. F. (2001). Teaching Conditions Theory. Transmigratory Moves - CORD, New York, New York University.
- Graham, S. F. (2002). "Dance: A Transformative Occupation." Journal of Occupational Science **9**(3): 128-134.
- Graham, S. F. (2002). "Experiential Learning In Praxis: Social Partner dancing." Australia New Zealand Dance Research Society **2**: 14-26.
- Hanna, J. L. (1979). To Dance Is Human. Chicago, The University of Chicago Press.
- Hoge, D. R., S. L. Hanson, et al. (1990). "School experiences Predicting Changes in Self-esteem of Sixth and Seventh Grade Students." Journal of Education Psychology **82**(1): 117-127.
- Johnson, W. R. and E. R. Bushkirk (1974). Science and Medicine of Exercise and Sport. New York, Harper & Row.
- Kratochwill, T. R. and J. R. Levin, Eds. (1992). Single-Case Research Design And Analysis. Hillsdale, New Jersy, Lawerence Erlbaum assoc., Pub.
- Leary, M. R., L. S. Schreindorfer, et al. (1995). "The Role of Self-esteem in Emotional and Behavioural Problems: Why is low self-esteem dysfunctional?" Journal of Clinical Psychology **Vol. 14**(3): 297-314.
- Mako Freundlich, B., L. M. Pike, et al. (1989). "Dance and Music for Children with Autism." Journal of Physical Education, Recreation and Dance **November/December**: 50-53.
- Marsh, H. (1990b). Self-Description Questionnaire II. Sydney, University of Western Sydney.
- Marsh, H. W. (1986a). "A bias of negatively worded items in rating scales for young children: A cognitive-developmental phenomena." Developmental Psychology **22**: 37-49.
- Marsh, H. W. (1988). Self Description Questionnaire 1 Manual. Sydney, University of Western Sydney.

- Marsh, H. W. (1990a). "A Multidimensional, Hierarchical Model of Self-Concept: Theoretical and Empirical Justification." Educational Psychology Review **2**(2): 77-172.
- Marsh, H. W. and B. M. Byrne (1989b). "Do we see ourselves as others infer: Self-other agreement on multiple dimensions of self-concept." paper in review.
- Marsh, H. W., B. M. Byrne, et al. (1988a). "A multifaceted academic self-concept: Its Hierarchical structure and its relation to academic achievement." Journal of Educational Psychology **80**: 366-380.
- Marsh, H. W. and P. Gouvenet (1989c). "Multidimensional self-concepts and perceptions of control: Construct validation of responses by children." Journal of Educational Psychology **81**: 57-69.
- Marsh, H. W. and R. Shavelson (1985a). "Self-concept: Its multifaceted, hierarchical structure." Educational Psychologist **20**: 107-125.
- Morrow, L. and J. Smith, Eds. (1989). The role of assessment and measurement in early literacy instruction. Englewood Cliffs, NJ, Prentice Hall.
- Segal, R. (1991). Helping Older Mentally Retarded Persons Expand their Socialisation Skills Through The Use Of Expressive Therapies. New York, Haworth Press.
- Shavelson, R. J., J. J. Hubner, et al. (1976). "Validation of construct interpretations." Review of Educational Research **46**: 407-441.
- Silk, G. (1989). "Creative Movement For People Who Are Developmentally Disabled." Journal of Physical Education, Recreation and Dance **November/ December**: 56-58.
- Sinclair, J. M., Ed. (1993). Collins English Dictionary and Thesaurus. Glasgow, HarperCollins.
- Tabachnick, B. G. and L. S. Fidell (1996). Using Multivariate Statistics. New York, HarperCollins Publishers Inc.
- Valentine-Garzon, M. A., M. Maynard, et al. (1992). "ROM Dance Program Effects on Frail Elderly Women in an Adult Day-Care Centre." Physical and Occupational Therapy in Geriatrics **11**(1).
- Vygotsky, L. S. (1978). Mind In Society. Cambridge, Harvard university Press.
- Wells, L. E. and G. Marwell (1976). Self-esteem: Its conceptualization and measurement. Beverley Hills, CA, Sage.
- Wheeler, M. (1996). "Benefits Abound: Including Ballroom Dance in University Dance Departments." Journal of Physical Education, Recreation and Dance **67**(2, February): 24-29.