

**SELF-TALK IN WHEELCHAIR BASKETBALL:
THE EFFECTS OF AN INTERVENTION PROGRAM ON DRIBBLING AND
PASSING PERFORMANCE.**

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The purpose of this study was to examine the effectiveness of a self-talk intervention program on performance of wheelchair basketball drills. Twenty-two (N=22) wheelchair basketball athletes from two different clubs of the same league participated in the study. The duration of the intervention was 12 weeks and its aim was the improvement of two fundamental basketball skills, passing and dribbling. One team was assigned as a self-talk group (STG), whereas the other as a control group (CG). The STG, in addition to their normal practice, used self-talk in the form of technical instruction, whereas the CG followed the same training schedule without the use of self-talk. Athletes' performance was evaluated before the start of the program and at two time points thereafter, midst the intervention and on completion. The results indicated that performance of the STG improved more than performance of the CG in the two basketball skills. Overall, the results of the study suggest that the use of self-talk, and in particular in the form of technical instruction, can be an effective tool for the improvement of performance in wheelchair basketball players and its use should be encouraged and practiced by coaches.

Physical activity for individuals with disabilities has been recognized as an important health issue (Cooper et al. 1999). Furthermore, the important psychological benefits arising from physical activity participation have been summarized by the International Society of Sport Psychology (1992). In brief, participation in sports by individuals with developmental disabilities can lead to increases in self-esteem, independence and improved physical fitness (Gibbons & Bushakra, 1989). Over the last twenty years many individuals with disabilities participate in disability sports. There is a growing recognition and popularity of disability sports of all kinds, and participation of athletes with disabilities in national and international sporting events is progressively increasing (Bloxham, Bell, Bhambhani & Steadward, 2001). Positive aspects of recreational and competitive sport for people with disabilities are apparent to any health professional that had the opportunity to witness first hand the growth in self-confidence, enhanced self-image, and all round maturity that accompanies young people participating in these activities (Banta, 2001).

One of the most popular sports for persons with a disability is wheelchair basketball (Cooper, 1990). Wheelchair basketball is a recreational and competitive sport played by participants with and without a disability (Groot et al. 2003). The sport of wheelchair basketball is similar to that of its able-bodied counterpart in terms of rules and game play. It is a team game that allows athletes with varying degrees and levels of disabilities to participate together based on an individual player classification system (Brasille & Hedrick, 1996). The player's classification system is based mainly on the competence of a classifier to recognize a player's physical ability in executing fundamental movements in wheelchair basketball. Players are awarded from 1 (minimal functional potential) to 4.5 points (maximal functional potential) on an ordinal scale, according to the extent of their physical ability, balance and manoeuvrability in the wheelchair (Strohkendl, 2001). The players are divided into eight different classes, ranging from 1.0 to 4.5 with half-point intervals, depending on their functional wheelchair basketball specific potential. A 1-point player has a minimal range of action often due to complete paralysis of the lower limbs and trunk. A 4.5-point player has a minimal disability resulting in maximal functional ability comparable to an able-bodied wheelchair basketball player. In international wheelchair basketball competition, a team is composed of players participating with a total amount of points no greater than 14 (International Wheelchair Basketball Federation, 2002). In all, wheelchair basketball is a well-established sport within the disabled society.

Bonnar (1997) reported that sport psychology is a discipline that considers the psychological factors that influence performance and participation in sports. Anxiety, self-confidence, motivation, aggression, and mental training techniques such as goal setting, mental imagery, self-talk and attentional control are some examples of what sport psychologists study. Athletes and coaches emphasize the importance of mental training because successful performance is not simply a function of physical skills; mental skills are also important. Nevertheless, there is a lack of research examining the psychological factors associated with disability sports. Research has primarily focused in comparing psychological profiles of athletes with disabilities to able-bodied athletes and individuals with disabilities that do not participate in sports (Bonnar, 1997). Overall, research has shown that participation in sports for individuals with disabilities can be useful tool for improving general contentment and quality of life (e.g. Henschen, Horvat, & French, 1984; Valliant, Bezzubyk, Daley & Asu, 1985). However, as Bonnar (1997) rightly suggests, there is more than simply describing the personality of disabled athletes, and towards this direction, research on the use of psychological skills training will advance our understanding regarding the applications of sport psychology for performance enhancement in athletes with disabilities. Weinberg and Gould (1999) reported that sport psychologists are interested in working with these populations, yet those actually working in that field may be quite limited.

In an attempt to examine the effectiveness of mental training in children with mental limitations, Screws and Surburg (1997) examined the effects of mental imagery on motor performance. After attending eight imagery sessions, performance of the imagery group improved significantly more than that of a control group in a cognitive (peg board) and a motor task (pursuit rotor). The authors concluded that, as for able-bodied individuals, mental imagery seems an effective mental strategy for disabled individuals too. Similar studies in disabled athletes are warranted to enhance our understanding regarding the application of these techniques for athletes with disabilities (Bonnar, 1997).

In the field of sport psychology, there is considerable research that supports the use of mental skills training programs for improving sport performance (Ming & Martin, 1996, Orlick, 1986; Wanlin, Hrycaiko, Martin, & Mahon, 1997). The use of cognitive strategies to improve performance has been a common practice among athletes for many years; however its systematic training has only recently begun and is expanding rapidly. Accordingly, the interest of sport psychologists in researching those techniques and designing mental training programs is growing.

One of those techniques that have attracted researchers' attention within the last decade is self-talk (ST). Hackfort and Schwenkmezger (1993, p. 355) defined ST as an *internal dialogue in which the individuals interpret feelings and perceptions, regulate and change evaluations and cognitions and give themselves instructions and reinforcement*. More recently, Hardy (2006, p. 84), with his working definition viewed ST as *verbalizations or statements addressed to the self, multidimensional in nature, having interpretive elements association with the content of statements employed, is somewhat dynamic and serving at least two functions; instructional and motivational for the athlete*. Instructional ST focuses on improving attention, and focusing on technical, tactical or kinesthetic aspects of task execution, whereas motivational ST aims to increasing effort and self-confidence and creating positive moods (Bunker, Williams, & Zinsser, 2001).

The role of ST in sport performance has been discussed extensively in the literature (Landin, 1994; Landin & Hebert, 1999; Rushall, 1984). Self-talk has been found to have a positive effect on performance in a variety of sports including tennis (e.g. Landin & Hebert, 1999; McPherson, 2000), endurance running (Weinberg, Smith, Jackson, & Gould, 1984) and basketball (Kendall, Hrycaiko, Martin, & Kendall, 1990; Perkos, Chroni & Theodorakis, 2002). Ziegler (1987) found that the use of instructional ST by beginners tennis players improved significantly their performance on forehand ground strokes. Rushall, Hall, Roux, Sasseville and Rushall (1988) reported that instructional and motivational ST improved performance on a ski task, whereas Mallett and Hanrahan (1997) and Landin and Hebert (1999) reported that instructional ST significantly improved performance of elite sprinters, and tennis players respectively. Theodorakis, Chroni, Laparidis, Bebetos, and Douma (2001) examined the effects of instructional ST on a basketball-shooting task. The results indicated that participants using instructional ST improved their performance compared to those of a control group. Theodorakis, Weinberg, Natsis, Douma, and Kazakas (2000) extended this approach by examining the influence of instructional versus motivational self-talk on different motor skills (a passing accuracy test in soccer, a serving accuracy test in badminton, a sit-up endurance test and a knee extension power test). They found that both self-talk strategies to be effective at improving performance. However,

instructional self-talk was found to be more effective than motivational self-talk for the accuracy skills, while both motivational and instructional self-talk were equally effective for motor skills requiring strength and endurance. Overall, experimental research has supported the effectiveness of ST (Hatzigeorgiadis, Theodorakis, & Zourbanos, 2004).

Overall, for able-bodied athletes the effectiveness of the ST strategy in relation to performance is well established, particularly in studies applying intervention programs (Johnson, Hrycaiko, Johnson, & Halas, 2004; Perkos et al., 2002). The purpose of the presented study was to examine the effectiveness of a self-talk intervention program on performance of wheelchair basketball players in two fundamental skills, dribbling and passing.

Method

Participants

Twenty-two male wheelchair basketball athletes from two different clubs of the same league (national league) participated in the study. Their mean age was 34.63 (\pm 9.30) years and their mean competitive experience was 7.72 (\pm 6.12) years. The two teams were randomly assigned as the intervention group ($n = 10$; mean age 34.63 \pm 9.30 years; mean competitive experience 7.72 \pm 6.12 years), and the control group ($n = 12$; mean age 32.10 \pm 6.95 years; mean competitive experience 5.90 \pm 4.12 years).

Tasks

Dribbling Test. The dribbling test from the International Perspectives on Adapted Physical Activity, a Study of Wheelchair Basketball Skills (Vanlerberghe & Slock, 1984) was used to assess dribbling performance. The test assesses dribbling speed and dexterity. It involves weaving in and around the cones as fast as possible, pushing the wheelchair and dribbling the ball adhering to the ISMFF dribbling rules. The score for each participant is the time needed to complete the task.

Passing Test. The passing test from the International Perspectives on Adapted Physical Activity, a Study of Wheelchair Basketball Skills (Vanlerberghe & Slock, 1984) was used to assess the passing performance. Participants place their wheelchairs so that the front casters are behind a line that was 2m from the wall. On a verbal signal the athlete passes the ball to the wall and catches it on the rebound in the air as many times as possible within a 15 seconds time frame. The score for each participant is the number of successful executions during this period.

Procedures

This research project was designed to examine the effects of an instruction ST intervention program on performance of two fundamental wheelchair basketball skills – dribbling and passing. The intervention was applied over a 12-week period, during 24 practice sessions (two sessions per week). Athletes from one club were assigned as the experimental group, whereas athletes from the other club were assigned as the control group. The ST intervention was embedded into practice sessions, which were led by two coaches, one for the experimental and one for the control group. During two meetings the coaches were informed about the two different practice modes, and were asked to adhere to a similar coaching program. The integrity of the experimental conditions was controlled by the presence of the lead researcher at practices of both teams to assure that the experimental and the control group procedures were followed precisely and the coaches employed similar and consistent coaching styles.

Intervention. During each practice session and for 20 minutes (after the completion of the warm-up) experimental and control group participants performed two specific drills for each skill. Each drill lasted two minutes, followed by a one-minute rest period. During the rest period, all participants were prepared for the next drill. The researchers selected the most appropriate drills after reviewing the existing wheelchair training literature (Hendrick, Byrnes & Shaver, 1989). For the dribbling drills each participant was weaving in and around cones arranged throughout the court. For the passing drills, each participant was passing the ball to the wall from 2m distance. The order of the drills during practice was counterbalanced.

At the onset of the experiment, participants of the experimental group were introduced to the new mode of practice and were informed that ST is a mental strategy to facilitate skill improvement. The content of ST was determined by surveying 10 experienced wheelchair basketball coaches. The drill specific ST cues utilized in this study were *hands-hands-ball* for dribbling and *fingers-stretch* for passing. The dribbling ST was targeted at reminding that participants should push the wheelchair two times in a row and then dribble the ball, but also to improve the rhythm of the movement. The passing ST was aimed

at helping the participants to hold the ball efficiently and throw the ball outwards towards the wall by stretching their hands. Prior to each drill, participants were reminded of the ST cue and how it related to the drill (Landin, 1994). In addition, participants were reminded to make the ST audible. Participants of the control group performed the same fundamentals drills for the same length of time as the experimental group participants did, however the practice sessions did not include ST.

Assessment. Three assessment sessions were conducted, which took place during practice sessions 1 (week 1), 12 (week 6) and 24 (week 12). Participants' test scores were recorded in personal scorecards. Prior to each skill test, participants of the experimental group were reminded to use the assigned ST cue.

Results

Descriptive statistics for dribbling and passing performance for the two teams are presented in Table 1.

Table 1.
Descriptive statistics for the two teams.

	Intervention group			Control group		
	Pre	Mid	Post	Pre	Mid	Post
Dribbling performance	23.84 ± 3.14	21.65 ± 2.16	20.80 ± 1.75	18.85 ± 3.08	18.71 ± 2.96	18.57 ± 2.76
Passing performance	9.10 ± 1.73	15.10 ± 1.66	15.20 ± 1.62	15.50 ± 1.57	15.58 ± 1.08	16.33 ± 0.98

Two way (2x3) mixed model MANOVA were calculated to test for differences in dribbling and passing performance changes between the experimental and the control teams. The analysis revealed a significant time by team interaction effect, $F(4, 17) = 19.85$, $p < .01$, $\eta^2 = .82$. Examination of the univariate effects revealed that the differences were significant for both the dribbling, $F(2, 40) = 9.92$, $p < .01$, $\eta^2 = .33$, and the passing performance, $F(2, 40) = 43.99$, $p < .01$, $\eta^2 = .69$. Post-hoc contrasts were calculated to explore the interaction effects in the three time points. The analysis regarding the dribbling performance revealed that there were significant effects from pre- to mid- intervention assessments, $F(1, 20) = 7.30$, $p < .05$, $\eta^2 = .27$, and from pre- to post- intervention assessments, $F(1, 20) = 16.15$, $p < .01$, $\eta^2 = .45$. The analysis regarding the passing performance revealed that there were significant effects from pre- to mid-intervention assessments, $F(1, 20) = 55.41$, $p < .01$, $\eta^2 = .74$, and from pre- to post- intervention assessments, $F(1, 20) = 82.75$, $p < .01$, $\eta^2 = .81$. The mean scores and the interaction pattern are presented in Figure 1 (dribbling) and Figure 2 (passing). Overall, it appeared that dribbling and passing performance for the experimental team improved more than that of the control team.

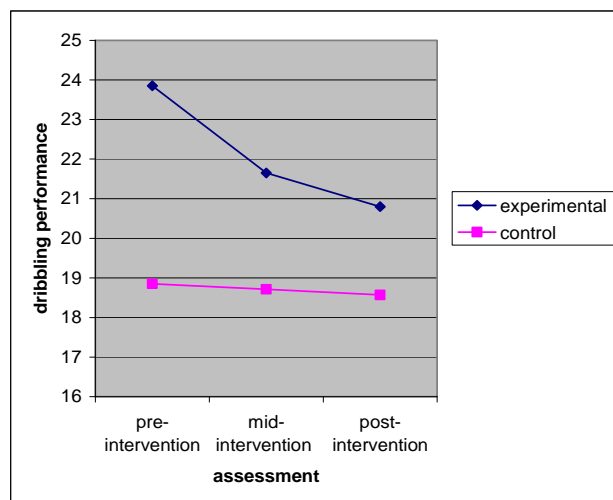


Figure 1.
The interaction pattern for dribbling performance (time).

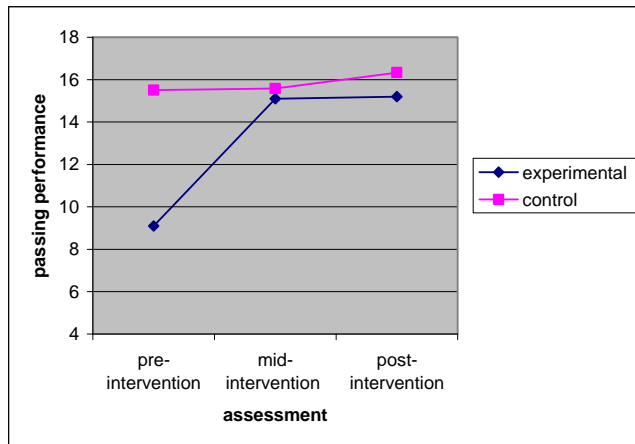


Figure 2.
The interaction pattern for passing performance (successful passes).

Nevertheless, because significant differences existed between the two teams in the pre-intervention assessments for the dribbling, $F(1, 21) = 14.05$, $p < .01$, $\eta^2 = .41$, and the passing performance, $F(1, 21) = 82.90$, $p < .01$, $\eta^2 = .81$, MANCOVAs were also calculated to further examine the differences between the two teams. Two one-way MANCOVAs were calculated, one for each task, where the pre-intervention evaluation was the covariate, whereas mid- and post-intervention assessments were the dependent variables.

For the dribbling performance, the analysis revealed that the multivariate effect of pre-intervention assessment was significant, $F(2, 18) = 27.06$, $p < .01$, $\eta^2 = .75$, whereas a non-significant multivariate effect was revealed for team, $F(2, 18) = 1.35$, $p = .28$, $\eta^2 = .13$. Examination of the univariate effects indicated that the effect for post-intervention performance, despite being non-significant, it was of considerable size, $F(1, 21) = 2.30$, $p = .14$, $\eta^2 = .11$. Examination of estimated means for the two teams suggested that dribbling performance of the experimental team was better than that of the control team (Figure 3).

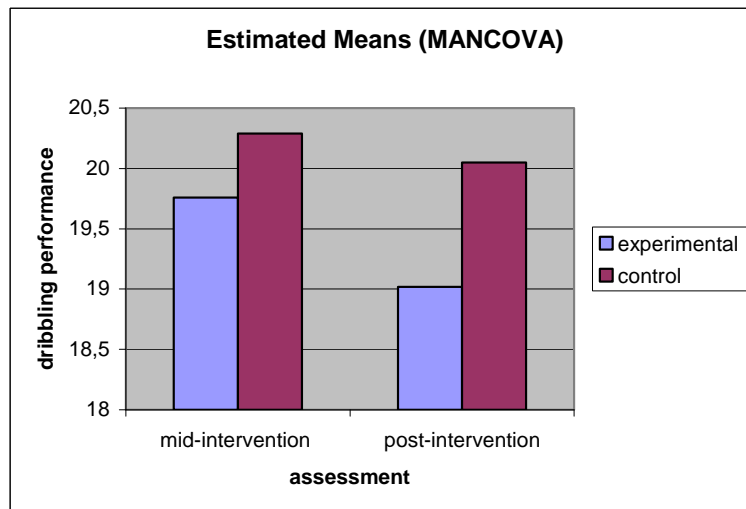


Figure 3.
Estimated marginal means for dribbling performance (time).

For the passing performance, the analysis revealed that the multivariate effect of pre-intervention assessment was significant, $F(2, 18) = 5.22$, $p < .05$, $\eta^2 = .37$, whereas a non-significant multivariate effect was revealed for team, $F(2, 18) = 1.67$, $p = .22$, $\eta^2 = .16$. Examination of the univariate effects

indicated that the effect for post-intervention performance approached significance and was of considerable size, $F(1, 21) = 3.42$, $p = .08$, $\eta^2 = .15$. Examination of estimated means for the two teams suggested that passing performance of the experimental team was better than that of the control team (Figure 4).

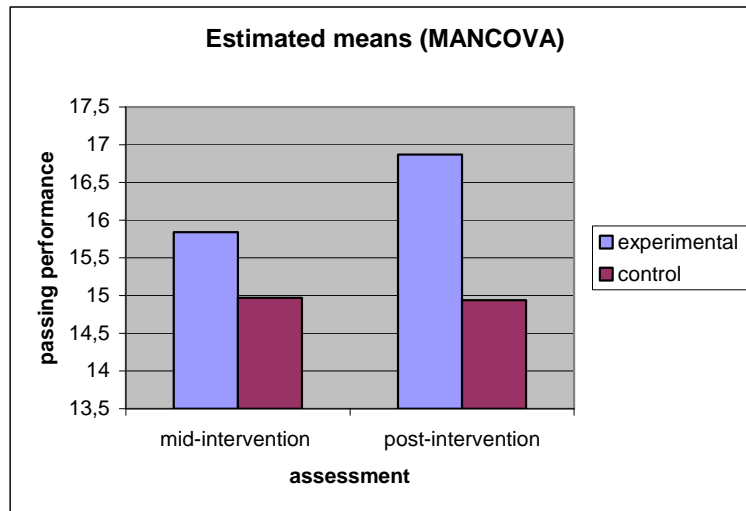


Figure 4.
Estimated marginal means for passing performance (successful passes).

Discussion

The use of self-talk strategies has been shown to facilitate learning and enhance performance in able-bodied athletes. Despite the progressive growth of disability sports, applied sport psychology research is lacking in the field. The present study aimed to examine the effectiveness of a ST intervention program on passing and dribbling performance in skilled wheelchair basketball players. Overall, the results gave indications that the intervention program improved dribbling and passing performance of the ST intervention group improved more than that of the control group.

The results of the study are comparable with that of other studies employing intervention programs to improve performance. Two intervention studies examined the effects of a mental skills training package in skilled athletes. Thelwell and Greenlees, (2003) examined the effects of a mental skills training package on competitive gymnasium triathlon performance and evaluated the utilization and impacts of the mental skills during performance. Four participants competed against each other on ten occasions in a single-subject multiple baseline across individuals design, which was used to evaluate an intervention package including goal setting, relaxation, imagery, and self-talk. The intervention was delivered across a four-day period to each of the participants with each skill being introduced in a daily meeting lasting a maximum of one hour. The findings of the study indicated that the mental skills training package enhanced competitive gymnasium triathlon performance. Thelwell and Maynard (2003) in a similar study examined the effectiveness of a mental skills package to both improve consistency and level of performance in cricketers. Semi-professional cricketers were assigned into experimental and control groups. Prior to the second season, the experimental group were provided with an intervention package consisting of goal setting, activation regulation, self-talk, mental imagery and concentration. The mental skill package was reported to enhance performance consistency and actual performance levels.

In an intervention study focusing on ST only, but with novice athletes this time, Perkos et al. (2002), examined the effectiveness of a self-talk training program on acquiring and performing three fundamental basketball skills (dribbling, passing and shooting). The results support instructional self-talk as being an effective tool for aiding skill acquisition and enhancing performance in skills of low complexity, when carefully designed and practiced.

Finally, in another study applying a ST intervention program with skilled athletes, Johnson *et al.* (2004) examined the effectiveness of self-talk on soccer performance. Participants were four female soccer

players from an elite under fourteen team. The results of this study indicated that the application of the self-talk program assisted shooting performance. Overall, it can be concluded that implementing ST interventions programs is an effective strategy towards performance enhancement, and the results of the present study seem to further support this proposition in the field of disabled sports.

One limitation that should be recognized is the lack of performance balance at the onset of the intervention between the intervention and the control groups. Repeated measures ANOVAS suggested that the improvement of dribbling and passing performance were higher for the experimental team than the control team. Nevertheless, MANCOVAS suggested that these differences in the increase of performance could be partly attributed to pre-intervention differences, when performance of the control team was significantly better than that of the experimental team for both dribbling and passing performance. Still, the results from the MANCOVAS do not reject the effectiveness of the intervention, because estimated means regarding dribbling and passing performance showed that performance of the intervention team was better than that of the control team. The lack of significance in that case could be attributed to the small size of the sample. Considering that this was a field intervention study, the size of the sample was reasonable. Moreover, support for the effectiveness of the intervention can be drawn from the size of the effects, which were considerable. In light of this limitation it should be noticed that the effectiveness of this intervention program should be cautiously interpreted.

Further research is warranted to support the present findings, but also to advance research in the use of mental skills in disabled sports. Future research could examine the extent to which self-talk in the form of technical instruction can improve more complex wheelchair basketball skills, such as shooting, but also the extent to which other types of self-talk can improve various wheelchair basketball skills. To our knowledge this is the first study to examine the application of a self-talk intervention program in disabled sports. Therefore, despite the identified limitation, the study provides valuable preliminary evidence for the understanding and the promotion of mental skills training in disabled sports.

References

- Banta, J. (2001). Athletics for people with disabilities. *Developmental Medicine and Child Neurology*, 43(3), 208-212.
- Bloxham, L.A., & Bell, G.J., Bhambhani, Y., & Steadward, R.D. (2001). Time motion analysis and physiological profile of Canadian world cup wheelchair basketball players. *Sports Medicine, Training and Rehabilitation*, 10, 183-198.
- Bonnar, K. (1997). *Disability Sports: Psychological/Mental skills* (On-line). Available: <http://edweb6.educ.msu.edu/kin866/resbonnar1.htm>
- Brasile, F.M., & Hedrick, B.N. (1996). The relationship of skills of elite wheelchair basketball competitors to the International functional classification system. *Therapeutic Recreation Journal*, 2nd Quarter, 114-127.
- Bunker, L., Williams, J.M., & Zinsser, N. (2001). Cognitive techniques for improving performance and building confidence. In J.M. Williams (Ed.), *Applied Sport Psychology: Personal growth to peak performance* (4th ed.) (pp. 225-242). Mountain View, CA: Mayfield.
- Cooper, R.A., (1990). Wheelchair racing sports science: a review. *Journal of Rehabilitation Research and Development*, 27, 295-312.
- Cooper, R.A., Quatrano, L.A., Axelson, P.W., Harlan, W., Stineman, M., Franklin, B., Krause, J.S., Bach, J., Cahbmers, H., Chao, E.Y.S., Alexander, M., & Painter, P. (1999). Research on physical activity and health among people with disabilities: A consensus statement. *Journal of Rehabilitation Research and Development*, 36, 142-154.
- Gibbons, S.L., & Bushakra, F.B. (1989). Effects of Special Olympics participation on perceived competence and social acceptance of mentally retarded children. *Adapted Physical Activity Quarterly*, 6, 40-51.
- Groot, S.D., Gervais, P., Coppoolse, J.M., Nathob, K., Bhambhanic, Y., Steadward, R., & Wheeler, G.D. (2003). Evaluation of a new basketball wheelchair design. *Technology and Disability*, 15, 7-18.
- International Society of Sport Psychology (1992). Physical activity and psychological benefits: A position statement. *International Journal of Sport Psychology*, 23, 86-91.
- International Wheelchair Basketball Federation (2002). IWBF Player Classification for Wheelchair Basketball (available online at: www.iwbf.org/classification/).
- Hackfort, D., & Schwenkmezger, P. (1993). Anxiety. In R. N. Singer, M. Murphey, & L. K. Tennant, *Handbook of Research on Sport Psychology* (pp. 328-364). New York: MacMillan.
- Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. *Psychology of Sport and Exercise*, 7, 81-97.

- Hatzigeorgiadis, A., Theodorakis, Y., & Zourbanos, N. (2004). Self-talk in the swimming pool: The effects of self-talk on thought content and performance on water-polo tasks. *Journal of Applied Sport Psychology, 16*, 138–150.
- Hendrick, B., Byrnes, D. & Shaver, L. (1989). *Wheelchair Basketball*. Washington: Paralyzed Veterans Of America.
- Henschen, K., Horvat, M., & French, R. (1984). A visual comparison of psychological profiles between able-bodied and wheelchair athletes. *Adapted Physical Activity Quarterly, 1*, 118-124.
- Johnson, J.J.M., Hrycaiko, D.W., Johnson, G.V., & Halas, J.M. (2004). Self-talk and female youth soccer performance. *The Sport Psychologist, 18*, 44-59.
- Kendall, G., Hrycaiko, D., Martin, G.L., & Kendall, T. (1990). The effects of an imagery rehearsal, relaxation, and self-talk package on basketball game performance. *Journal of Sport & Exercise Psychology, 12*, 157–166.
- Landin, D. (1994). The role of verbal cues in skill learning. *Quest, 46*, 299–313.
- Landin, D., & Hebert, E.P. (1999). The influence of self-talk on the performance of skilled female tennis players. *Journal of Applied Sport Psychology, 11*, 263–282.
- Mallett, C.J., & Hanrahan, S.J. (1997). Race modelling: an effective cognitive strategy for the 100 m sprinter. *The Sport Psychologist, 11*, 72 - 85.
- McPherson, S.L. (2000). Expert- novice differences in planning strategies during collegiate singles tennis competition. *Journal of Sport and Exercise Psychology, 22*, 39-62.
- Ming, S., & Martin, G.L. (1996). Single-subject evaluation of a self-talk package for improving figure skating performance. *The Sport Psychologist, 10*, 227–238.
- Orlick, T. (1986). *Psyching for Sport: Mental Training for Athletes*. Champaign, IL: Human Kinetics.
- Perkos, S., Chroni, S. & Theodorakis, Y. (2002). Different kinds of self-talk for learning fundamental basketball skills. *Sport Psychologist, 12*, 45-57.
- Rushall, B.S. (1984). The content of competition thinking. In W.F. Straub, & J.M. Williams, (Eds.), *Cognitive Sport Psychology* (pp. 51–62). Lansing, NY: Sport Science Associates.
- Rushall, B.S., Hall, M., Roux, L., Sasseville, J., & Rushall, A.S. (1988). Effects of three types of thought content instructions in skiing performance. *The Sport Psychologist, 2*, 283–297.
- Screws, D.P., & Surburg, P. (1997). Motor performance of children with mild mental disabilities after using mental imagery. *Adapted Physical Activity Quarterly, 14*, 119-130.
- Strohkendl, H. (2001). Implications of sports classification systems for persons with disabilities and consequences for science and research. In Vista '99 – *New Horizons in Sport for Athletes with a Disability: Proceedings of the International Vista '99 Conference* (edited by G. Doll-Tepper, M. Kro"ner and W. Sonnenschein), pp. 281–301. Koln, Germany: Meyer & Meyer Sport.
- Theodorakis, Y., Chroni, S., Lapidis, K., Bebestos, V., & Douma, I. (2001). Self-talk in a basketball-shooting task. *Perceptual and Motor Skills, 92*, 309–315.
- Theodorakis, Y., Weinberg, R., Natsis, P., Douma, I. & Kazakas, P. (2000). The effects of motivational versus instructional self-talk on improving motor performance. *The Sport Psychologist, 14*, 253–272.
- Thelwell, R.C., & Maynard, I.W. (2003). The effects of a mental skills package on 'repeatable good performance' in cricketers. *Psychology of Sport and Exercise, 4*, 377-396.
- Thelwell, R.C., & Greenlees, I.A. (2003). Developing competitive endurance performance using mental skills training. *The Sport Psychologist, 17*, 318-337.
- Vanlerberghe, J.O.C., & Shock, K. (1984). *International Perspectives On Adapted Physical Activity*. Champaign, IL: Human Kinetics.
- Valliant, P.M., Bezzubik, I., Daley, L., & Asu, M.E. (1985). Psychological impact of sport on disabled athletes. *Psychological Reports, 56*, 923-929.
- Wanlin, C.M., Hrycaiko, D.W., Martin, G.L., & Mahon, M. (1997). The effects of a goal-setting package on the performance of speed skaters. *Journal of Applied Sport Psychology, 9*, 212-228.
- Weinberg, R.S., Smith, J., Jackson, A., & Gould, D. (1984). Effect of association, dissociation, and positive self-talk on endurance performance. *Canadian Journal of Applied Sport Sciences, 9*, 25–32.
- Weinberg, R.S., & Gould, D. (1999). *Foundations of sport and exercise psychology*. Champaign, IL: Human Kinetics.
- Ziegler, S.G. (1987). Effects of stimulus cueing on the acquisition of ground strokes by beginning tennis players. *Journal of Applied Behavior Analysis, 20*, 405-411.