
Chapter 5

Summary, conclusions, shortcomings
and recommendations



SUMMARY, CONCLUSIONS, SHORTCOMINGS AND RECOMMENDATIONS

5.1 Summary

5.2 Conclusion

5.3 Shortcomings

5.4 Recommendations

5.1 SUMMARY

The purpose of this study was firstly to determine whether the mental skills levels of players in different playing positions differ from one another. Secondly, to determine the extent of tertiary institutions field hockey players in South Africa's opinion regarding the importance of and need for mental skills training (MST) programmes for each gender. Thirdly, to determine the players' perception of their ability to prepare psychologically for matches for each gender. Chapter 1 provided a brief summary of the problem that underlies the research questions of the study and the research questions as such, the objectives and hypotheses of the study as well as the structure of the dissertation.

Chapter 2 consisted of a literature overview titled "A Literature study on mental skills training in sport". The purpose of this review was to provide information regarding the game of field hockey, the importance of MST on sport performance, the sport psychological components that should be included in a MST program, mental skills training and how it is assessed, fundamental skills, psychosomatic skills, cognitive skills and the role of the sport psychologist in improving of field hockey performance.

Overall the literature showed that both coaches and athletes' awareness regarding the development and implementation of MST has increased dramatically over the last couple of years. It was clear that when MST is combined with physical training it increases athletes' ability to cope with the demands of the particular sport and subsequently enhances performance. It was further emphasized that these programmes should include a variety of sport psychological skills and may only reach the desired outcome if the psychological skills take into consideration the demands of the sport.

Chapter 3 consisted of the first article titled "A survey of mental skills training among South African field hockey players at tertiary institutions". The purpose of this article was to compile a general profile of the players' psychological skill levels for the total group and by gender, to determine the players' opinion regarding the importance of MST, their perceived need for MST, and their perception regarding their ability to prepare psychologically for matches. A total of 197 (91 males and 106 females) South African field hockey players at tertiary institutions that participated in the University Sport of South Africa tournament, took part in the study. The subjects completed the demographic and general information questionnaire as well as two sport psychological questionnaires (namely the Psychological Skills Inventory (PSI) and the Ottawa Mental Skills Assessment Tool (OMSAT-3)). Descriptive statistics (mean, minimum and maximum) and frequencies were calculated using the SPSS for Windows (version 13.0). Non-parametric techniques of Chi-square were employed to test the significant gender differences. The level of significant differences was set at $p \leq 0.05$.

In general the players revealed poor mean scores for five of the six psychological skill subscales of the PSI. The group showed the highest mean score for self-confidence, commitment and goal-setting for the OMSAT-3 with the remaining variable scores falling within the moderate category. The results showed significant gender differences for skills such as goal-setting. The males outperformed the females with regard to activation control whilst the females scored higher mean score for the skill of achievement motivation. The results further showed that 39% of the males and 47% of the females regarded MST as very important for enhancing performance and also showed a great need for these programmes. It was interesting to note that the majority

of the players perceived their ability to prepare psychologically before a match as good, although only 33% of the participants had prior exposure to MST and the overall results with regards to their actual mental skill levels were poor.

From the results it is clear that coaches, sport psychologists and other role players in field hockey should devote their time and energy in developing and implanting MST programmes specifically for hockey.

Chapter 4 consisted of the second article titled “Mental skill levels of South African tertiary institutions field hockey players in different playing positions”. The purpose of this article was to determine the possible positional differences in mental skill levels among 91 South African tertiary institution male field hockey players. The subjects were divided into four positional groups namely, goalkeepers (n=12), forwards (n=24), midfielders (n=25) and backs (n=30). The participants completed the OMSAT-3. Effect sizes were used to determine the practically significant differences between the four positional groups for each of the twelve psychological skills.

Overall, 22 moderate and 13 large practically significant differences were observed. The results showed that the goalkeepers scored the lowest values in seven (self-confidence, commitment, stress control, relaxation, activation, focusing and refocusing) of the twelve subscales when compared with the other three positional groups. The players in the forward position outperformed the other positions for the skills of commitment, relaxation, activation, imagery and mental rehearsal. The midfielders, compare to the other positions, showed the highest scores in six of the twelve psychological skills. When comparing the players in the back position with the goalkeepers, forwards and midfielders, the results showed that these players scored the lowest values in the skills of goal-setting, imagery, mental practice and competition planning.

From the results it is clear that positional differences with regard to mental skills levels do exist. Furthermore, the results emphasise the fact the different demands of each position in team sports, should also be taken into consideration when developing a MST programme for hockey players.

This dissertation was submitted in article format, as approved by the Senate of the North-West University, therefore, two articles (Chapter 3 and 4) were included. Both articles were compiled in accordance with the guidelines of the African Journal of Physical, Health Education, Recreation and Dance. Upon submission of this dissertation, Article 1 had been accepted for publication in the African Journal of Physical, Health Education, Recreation and Dance. Prior to the finalisation of Article 1, the data for this article was also presented at the South African Sport and Recreation Conference held on 11- 14 August 2010 in Durban. Article 2 will be submitted for publication during January 2011. Each consisted of an introduction, methods, results and discussion according to the specific study. The research methods (subjects, procedures and data analyses) were discussed together with the results and discussions of each of the two articles.

5.2 CONCLUSION

The conclusions drawn from this research are presented in accordance with the set hypothesis (Chapter 1):

Hypothesis 1: *South African field hockey players at tertiary institutions will perceive MST to be important and will express a need for MST programmes.*

Hypothesis 1 is accepted. The results showed that 40.5% of the players perceived MST programmes as important and 43% as very important. This was also true regarding their need for MST seeing that 79% of the players expressed a need for MST (41% = Have a need, 38% = Have a great need).

Hypothesis 2: *South African field hockey players at tertiary institutions will perceive their ability to prepare psychologically for a competition as good.*

Hypothesis 2 is accepted. The results of the total group of players' showed that 82.5% of the players were of opinion that their ability to prepare psychologically for matches was good or very good.

Hypothesis 3: *South African field hockey players at tertiary institutions will have average and poor mental skill levels.*

Hypothesis 3 is accepted, based on the overall poor scores with regards to the players' mental skill levels. The players showed poor scores for five of the six psychological skills of the PSI. Achievement motivation was the only skill in which the players scored means values in the average category. When looking at the OMSAT-3 results, the players scored above average for the foundation skills (goal-setting, self-confidence and commitment) and average for the other nine psychological skills.

Hypothesis 4: *There will be differences between South African field hockey players at tertiary institutions in different playing positions.*

Hypothesis 4 is also accepted, due to the significant differences found among South African tertiary institutions male field hockey players in different playing positions. The results revealed 22 moderate and 13 large practically significant differences in MST. From the results it was clear that the goalkeeper had the lowest MST scores for seven of the 12 psychological subscales. The midfielders outperformed the other three positional groups in six of the 12 subscales.

5.3 SHORTCOMINGS

The following shortcomings should be taken into consideration when interpreting the results of this study:

- Firstly, the study was limited to South African tertiary institution field hockey players.
- Secondly, only 197 of the approximate 550 players that competed in the University Sport of South Africa tournament participated in the study.
- Thirdly, the study was limited to the use of only the PSI and OMSAT-3 questionnaires.
- Lastly, a limited amount of research studies could be traced regarding field hockey.

5.4 RECOMMENDATIONS

The results of the study emphasized the importance of MST programmes in the game of field hockey. From the outlined shortcomings in the present study, it is recommended that future research focus on:

- Including all South African tertiary institution field hockey players and drawing comparisons with other hockey players in different countries' tertiary institutions.
- Including a large number of players in all South African tertiary institutions' field hockey.
- Including also other Sport psychological questionnaires than those used in this study as well as available objective measures of mental skills testing in field hockey players.
- The fact that more research studies are required in the sport of field hockey so as to maximize the limited existing literature.
- Intervention studies regarding MST in field hockey are required.