THE EFFECTS OF LOST MOVE SYNDROME ON

INDIVIDUAL MOTIVATION LEVELS IN NATIONAL LEVEL

TRAMPOLINISTS.
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ACKNOWLEDGEMENTS

Firstly, I would like to thank my tutor for all the time and effort she has put into guiding me through the dissertation process.

I would also like to take this opportunity to thank my parents for their on-going support throughout my time at university.
Abstract

This study examined the effects of lost move syndrome (LMS) on elite trampolinist’s motivation levels. Semi-structured interviews were conducted with four participants. Content analysis was used to scrutinise the information provided by the participants. Four general dimensions emerged, within which six themes were identified with further individual sub-themes following. Findings showed that motivation levels were lower at the onset of the syndrome, and increased once the performers started to get their move back. This underpinned the self-determination theory (SDT) as the participant’s intrinsic motivation increased as their perceived competence grew, thus, increasing self-determination. Participants discussed coping strategies that were used during LMS and identified that more social support and understanding of the syndrome was needed. Recommendations for future research within this field are offered.
CHAPTER I
INTRODUCTION
Chapter One

Introduction

The aim of this chapter is to provide a brief insight to the history of trampolining and explain how competitive trampolining is structured nationally within the UK. The background to recent research will be discussed and the aim of the study will be outlined.

History of Trampolining

There are many different opinions about how trampolining evolved. For example, Horne (1978) suggested that it was in 1936 that the first manufactured piece of apparatus resembling a trampoline was built. George Nissen, an American tumbling and diving champion apparently watched the local circus and was intrigued by the trapeze artists and how they landed on the safety net below and manoeuvred around until leaving the net (Horne, 1978). From this, Nissen started to construct the first simple type of trampoline. American armed forces also used trampolines in their training regimes during the 2nd world war which was particularly helpful for the flyers as they were able to experience aerial orientation (Horne, 1978). In contrast to this belief, Walker (1985) stated that in the 1920’s and 1930’s a bouncing bed was used by acts in music halls and in the circuses. In the 1950’s Britain saw its first trampoline competitions develop and coincidently the first British male and female champions were both divers (Walker, 1985). The British Trampoline Federation was established in 1963 after taking over from the Amateur Gymnastic Association Trampoline Committee (Phelps and Phelps, 1990).
**National competitions**

Today competitive trampolinists have to perform two routines in order to reach the final of a competition. The first routine is a set routine in which there are a number of compulsory moves; the second routine is a voluntary routine in which trampolinists perform their most difficult skills in order to gain the highest tariff. Both routines must consist of 10 skills linked together. Five judges mark the routines and the highest and lowest marks are deducted from the overall mark and the remaining three scores are added together. For the set routine only the execution of the skills are marked, and in the voluntary routine the execution and the difficulty of the routine are judged. The two scores are added together to get an overall score (www.baga.co.uk)

**Background to research**

Day, Thatcher, Greenlees and Woods (2006) suggested that research surrounding lost move syndrome (LMS) within the trampolining domain is scarce and there is limited explanation as to why or how LMS starts. Lost move syndrome can be described as a psychological condition in which athletes experience a mental block which stops them from performing a skill that was once automatic (Day et al., 2006). A previous study by Day et al., (2006) illustrated that participants explained the extra pressure to have to perform the skill either on its own or in a routine cause’s stress which is the main reason leading to the lost move. Other research involving psychological blocks have been within golf and cricket, and the javelin event. The phenomenon surrounding golf and cricket is known as the ‘yips’. Research within this area suggested that the ‘yips’ can be classified as either a psychological disorder known as ‘choking’ or a physical
impediment named ‘dystonia’ (Smith, Adler, Crews, Wharen, Laskowski, Barnes, Bell, Pelz, Brennan, Smith, Sorenson, and Kaufman, 2003). To the authors knowledge, there is no research to suggest why or how the ‘yips’ phenomenon arises.

The main factor examined within this study was motivation. According to Hollembeak and Amrose (2005) motivation is defined as the intensity and direction of effort. Both intrinsic and extrinsic motivations play an important part in an athlete’s career. Intrinsic motivation relates to taking part in sport for reasons such as enjoyment and satisfaction, whereas extrinsic motivation relates to participation for external rewards such as prize money and social recognition (Taylor and Wilson, 2005).

**Aim of the study**

Anecdotal evidence suggests that LMS is an issue many trampolinists face throughout their sporting lives. Due to the limited amount of literature about the syndrome and how or why it happens, the researcher felt it was an area of interest to investigate. The aim of this study was to examine how LMS affects the motivation levels of elite trampolinists. From the findings, recommendations for future research within this field will be provided and applied implications regarding effective coping strategies to overcome LMS will be offered.
CHAPTER III
METHODOLOGY
Chapter III
Methodology

Participants:
Participants were 4 elite level trampolinists between the age of 20 and 23, two competing at grade 1 and two competing at grade 2; both male and female competitors were invited to take part in the study in order to avoid gender bias. Three participants were female and one was male.

Interview Guide:
After researching studies about LMS the decision was made to devise an interview guide surrounding the individual’s experiences and feelings during LMS and the effects on their motivation levels. ‘An interview guide provides topics or subject areas within which the interviewer is free to explore, probe and ask questions that will elucidate and illuminate that particular subject’ (Patton, 2002). As a result, three separate sections were identified within the interview guide (See Appendix A). Section one was a short segment which included information about the trampolinist’s sporting background. It included questions such as, ‘What level do you currently compete at?’ The second section was about their general knowledge and experiences of lost move syndrome, for example, ‘What were the symptoms you experienced while you were going through LMS?’ The final part had questions that described how the lost move syndrome affected the individual’s motivation levels for the duration. ‘I would like you to describe to me how the LMS affected your motivation levels in the training environment’ is an example of a question from section 3.
**Ethical considerations**

Ethical considerations were taken into account before the investigation could commence. The participants were informed that their involvement was completely voluntary and that they did not have to take part if they did not wish to do so. They also knew they could withdraw from the study at any point they felt necessary, and that the information such as their names, ages, and results were strictly confidential and only available to those involved in the study. There was no bias towards ethnicity, gender, or age within the investigation. Anyone who was under 18 at the time of the interviews would have needed parental or guardian consent. Subjects were clearly informed about the purpose of the study and signed an informed consent form prior to participation (See Appendix B).

**Procedure:**

Four national level trampolinists who met the selection criteria were contacted initially via telephone by the researcher in order to determine whether or not they were willing to take part in the study. A selection criterion was based on participant’s competitive experience at national level and experience of lost move syndrome within the last 2 years. Performers from a club who met the selection criteria were invited to participate in the study. A preliminary study was undertaken which intended to highlight any potential flaws in the interview guide and how it was being conducted. A Dictaphone was used to record the pilot study to ensure correct usage. A random selection of questions from the interview guide was used in order to practice the interview technique and to make the interview flow as if a conversation rather than a set of consecutive questions. At the end of the session, any pros or cons about the delivery of the interview were reviewed and points were taken into consideration in order to improve for the first interview.

Once each subject had replied to the email willing to take part, a date, time, and a venue was arranged to conduct the interview. Each individual chose the time and place so it was convenient to them. Participants received a letter of explanation and a consent form to read and sign on the day of the interview. Prior to the interview commencing, an
explanation about each section of the interview was given to the subject so they had an idea of what they were going to be talking about. Testing was carried out before each interview to ensure correct working of the equipment. When testing the Dictaphone on the day of subject C’s interview there was a problem with it so alternative equipment (webcam) had be used to record the interview. During the interview notes were taken down so the researcher could ask other relevant questions if the subject mentioned something that had not been asked. At the end of the interview the participant was asked to share anything else they felt was left out of the interview or anything else they wanted to add that had not already been mentioned. Once the recording had finished the participant was informed that they would receive an email in the near future thanking them for their involvement in the study.

Once all data was gathered, the interviews were then transcribed verbatim onto a Microsoft word document. Content analysis was used to gather the results from the interviews. Patton (2002) stated that content analysis refers to searching for recurring words or themes. In other words the core content of the transcripts were analysed to identify patterns. A code was devised in order to pick out the occurring themes within all four interviews. Once the interviews had been coded, quotes were grouped together to identify general dimensions, themes and sub themes.
CHAPTER V

CONCLUSION
Chapter Five

Conclusion

The results from this study illustrate that motivation levels are highly affected during the experience of lost move syndrome. Motivation levels were constantly changing depending on self-confidence and perceived competence of the performers. Motivation was lower at the onset of the syndrome due to the loss of self-confidence. This finding can be linked to the SDT as they lacked competence therefore their motivation dropped. However, towards the end of the syndrome participants described an increase in self-confidence which in turn increased intrinsic motivation. Once the skill had been regained a sense of self-determination was felt. The findings also suggested that the higher the competitive level one competes at the more intrinsic motivation they will have. In relation to the four general dimensions identified, motivation was put under lost move consequence. External regulation was the type of extrinsic motivation that was described by the Grade 2 trampolinists as they stated they wanted to show other people they could still do the move.

Three strategies were used, within which each participant used at least one to overcome the syndrome. The findings show that social support was the most motivational as the participants were able to talk about their feelings to team mates and coaches, and were always encouraged to keep going. However, there was a need for more social support for one participant, as she found that her coach was not helpful at the time. Only one participant used self-talk, therefore there was not a lot of information provided for this psychological strategy. Imagery was the other psychological strategy that participants used in the present investigation. The more elite trampolinists described a more positive attitude towards imagery whereas; a Grade 2 participant explained she did not have a lot of help when using imagery as a strategy. Negative images were a problem with two of the participants, although one participant was able to change the images to a positive focus as she had help from a sport psychologist.
During LMS a number of emotions were present. Participants described a fear of performing the move and suggested this was because they did not know how to take off for the skill. Fear was related to the type and level of motivation as it made one participant scared to even watch anyone on the trampoline. Stress and anxiety were applied to both lost move antecedent and lost move consequence. The findings show that participants attributed frustration to the fact that they knew they could do the move but when they tried to take off they just couldn’t. This finding was related to a previous study undertaken by Day et al., (2006). Lastly, embarrassment was noted as one of the emotions felt during LMS. Little was said about embarrassment, but it was applied to lost move consequence as the general dimension.

Participants illustrated that the moves they lost were forward twisting moves which is a similar finding to Day et al., (2006). All the moves were compulsory for the national Grade 1 and Grade 2 set routines which could have made a big impact on their qualifying competitions if they were in competition season. As aforementioned, one participant did have a competition coming up, but with the help of a sport psychologist, was able to recover from the syndrome in time to compete.

Each participant described having knowledge of what LMS is and they had all heard of it before. Two participants explained having knowledge from a coach, whereas two participants illustrated that they had knowledge from elsewhere, such as, other people experiencing it before them.

Over-thinking was an issue for some of the participants in the present study. There were mixed opinions as to whether the over thinking was an antecedent or a consequence to LMS. One of the reasons as to why participants were over thinking could be because they wanted to get the skill back as quick as possible, therefore were thinking of how to do it rather than focussing on strategies to overcome it. Negative thoughts were also present in the investigation which coincided with another investigation conducted by Day et al., (2006). Negative thoughts were a consequence of LMS and could be attributed to lower levels of motivation.
Limitations and delimitations

The present study has allowed further research into an area that has had limited investigations in the past. Due to this little information surrounding lost move syndrome, the researcher has been able to provide an insight to the difference in type and level of motivation between two distinct national trampoline grades. Using a qualitative method for the investigation has allowed a further understanding of what happens to the motivation levels and how participants overcome it. This may, in the future, help coaches, trampolinists and sport psychologists to assist in the recovery of LMS more effectively.

Due to the author’s lack of experience in scientific investigations the reliability and validity of the study may not have been as accurate as hoped. As there is limited literature in this field, the interview guide may not have included the appropriate questions to gain the required information for the wanted outcome. A small sample group was used which did not allow deeper comparison.

Future research recommendations

The results from this investigation suggest that an area that needs to be looked at in the future is maintaining the same motivation levels throughout the LMS. However the main concern is with the type of moves that the trampolinists are losing. The findings demonstrated that forward twisting moves were the type of move lost within the present study and also in a previous study. Coaches and sport psychologists in future will need to look at the initial skill acquisition of these particular moves in order to understand fully why there is a problem. The type of strategy that the performer adopts to overcome the syndrome also has an impact on the time and effectiveness of the recovery, therefore, the author would suggest that this needs to be considered for future research as well. Another factor that can be taken into consideration is whether there are any variations across the lower grades or whether it is just at the higher grades where there is more pressure to perform better. The present investigation did not show any significant differences between male and female competitors as there was only a small sample group. With this in mind, future researchers could possibly investigate this variable.
REFERENCES


APPENDIX A
Appendix A

INTERVIEW GUIDE

SECTION ONE: SPORTING BACKGROUND.

1) What level do you currently compete at?
2) What is the highest level you have competed at in trampolining?
3) How long have you been involved in trampolining at national level?
4) How long have you been involved in trampolining at a competitive level?
5) How old are you now?
SECTION TWO: LOST MOVE SYNDROME.

This section will focus on the basic information about lost move syndrome. I will be asking you questions which will relate to your feelings and experiences throughout the duration of LMS. Please try to answer all questions as accurately and honestly as you can.

1) Can you outline for me what you understand or know about LMS?

2) Describe your personal experience of LMS?
   Probe: - how long ago?
   - What level where you at?

3) At the time of your experience, did you know it was LMS, and had you heard of it before?
   Probe: -how did you know, e.g. through friends, club mates, coach etc.
   - if no…what did you think was the problem?

4) What do you think triggered or caused your LMS?
   Probe: - an important competition
   - stress outside trampolining

5) What were the symptoms you experienced while you were going through LMS?
   Probe: - anxiety
   - stress

6) Did the LMS have an effect on your other moves, if so what type of moves were they?
   Probe: -similar moves
   - harder
   - easier

7) What feelings did you experience during this time?
   Probe: - fear
   - de- motivated
   - frustration

8) Describe how it affected you life outside of trampolining?

9) How did you cope with LMS? Get as much information about each strategy as possible
   Probe: - strategies e.g. imagery
- Social support etc

10) At what times did you use these strategies?
Probe: -before the move itself
- Before training/ competition

11) Which strategies were most effective and why?

12) Who were the key people that supported you through this? What was each person’s role? Who was most effective at helping you and why?

13) When you had overcome LMS, what did you feel about your future training/competition?
Probe: - does this affect your training/ performance?

14) If you got LMS again, what would you do differently?
SECTION 3: MOTIVATION:

In this section I am going to be asking you about your motivation levels and the types of motivation you felt during your experience of lost move syndrome and how this affected you being able to perform the skill again.

1) I would like you to describe to me how the LMS affected your motivation levels in the training environment.
   Probe: -increase/ decrease
   - If increased: how do you feel this helped to overcome the fear of the move?
   - If decreased: How did your coach/ friends help to keep you motivated and interested in training?

2) How do you feel motivation was influenced due to not being able to perform the skill?
   Probe: - doing it for you?
   - wanting to be able to perform well?
   OR:
   - wanting to outperform others again?
   - wanting to win and gain social recognition?

3) How do you feel changes in your motivation (type and level) affected your recovery from LMS?
   Probe: - did it hinder your time to get the skill back?
   - did it help you?

4) During your LMS, how did your motivation levels differ between training and competition?
   Probe: more or less motivated to compete?

5) Did the change in motivation transfer into your everyday life, for example in education or social life?
   Probe: Why do you feel this was?

6) Once you were able to perform the skill again, describe your motivation towards your sport?

7) During your LMS, can you detail any aspects of training that influenced (increased or decreased) your motivation?
   Probe: - training by self (may be embarrassed to train with others)
   - training in a club environment.

8) If you got LMS again, how do you think it would influence your motivation?
   Probe: more positive towards it- increased motivation to get the move back
APPENDIX B
Appendix B

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Dear

I am in the third year of a Bsc (Hons) Sports Coaching at The University of Wales Institute Cardiff (UWIC). I am undertaking a dissertation focusing on the lost move syndrome and the effect this has on individual motivation levels in elite trampolinists.

I am currently in the process of organising interviews for this piece of work and would like you to be one of the participants. I would be grateful if you would consider taking part in an interview. It would be at a time and place convenient to you. The interview will last approximately 45 minutes.

I take this opportunity to thank you for your time in considering this matter and if you require any further information please do not hesitate to contact me.

Yours Sincerely,

Lauren Shipman.

The reasons for my participation in Lauren Shipman’s study have been clearly explained. I understand that my involvement in the investigation is completely voluntary and I can choose to withdraw at any point I feel is appropriate. I am aware that all the information I provide will remain confidential and I hereby agree to take part in the project.

Signed (Parent/ Guardian if under 18): ………………………………………