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THE PROCESS OF RESONANCE OF
FOUR TRACK ATHLETES

by

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THESIS

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in partial fulfillment of the requirements
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ABSTRACT

The goal of this study was to identify if and how athletes experience the process of resonance and if and how they feel it affects their performance and overall well-being. Four middle distance track athletes ($M = 16.5$) in their specializing years of participation (Côté, & Hay, 2002) participated in in-depth, semi-structured interviews using the Resonance Performance Model (RPM) (Newburg, 2001) as a structural framework. Over a period of 10 weeks, the athletes were interviewed once every three weeks and completed a daily journal to follow their personal process of resonance and its effect on training, competition, and well-being. Interview questions included: What feelings do athletes seek from their sport on a regular basis? What preparation strategies help them to experience these feelings? What prevents these feelings from occurring? How do athletes get these feelings back when they are lost? How does living ideal feelings affect training, performance, and overall well-being? Responses were analyzed both deductively and inductively based on each component of the RPM. Results showed that, over time, the athletes became more connected to each component of the RPM as the study evolved. At first the athletes did not seem to be familiar with the process of living ideal feelings. However, they became more aware about how they felt during training, competition, and daily living. Resonance also appeared to affect their well-being and to positively affect track performance. Resonance is discussed in relation to the concepts of flow (Csikzentmihalyi, 1990), individual zones of optimal functioning (Hanin, 2000), engagement (Maddux, 1997), intrinsic motivation (Deci & Ryan, 2000) and authenticity (Treadgold, 1991). Implications for future research and future application of the RPM are provided.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS.....	v
 PART ONE: EMPIRICAL, THEORETICAL AND METHODOLOGICAL CONSIDERATIONS	
INTRODUCTION	2
Conceptual Framework.....	5
The dream	6
Preparation	7
Obstacles	7
Revisiting the dream	7
Purpose of the Study.....	8
 REVIEW OF LITERATURE	 10
The Dream	10
Engagement.....	10
Authenticity.....	12
Flow	13
Individual Zone of Optimal Functioning.....	15
Enjoyment/fun/satisfaction	17
Self-actualization	19
Life span theory of control.....	20
Preparation	21

Motivational disposition	21
Goal orientation	23
Social factors.....	24
Training.....	25
Mental skills.....	26
Obstacles	27
Disruptions in flow	27
Social factors.....	28
Anxiety.....	29
Revisiting the dream	29
Balance.....	30
Rest/recovery	30
Perspective	30
METHODOLOGY	33
Research Paradigm.....	33
Interviews.....	34
Participants.....	35
Data Collection and Analysis.....	36
Researcher preparation.....	36
Interview Steps and Procedures	37
First interview	38
Follow-up interviews	39
Journal.....	39
Data analysis	40
Qualitative analysis.....	40
Quantitative analysis.....	41

Steps to Enhance Trustworthiness	41
Methodological Contribution.....	42

PART TWO: RESULTS OF THE STUDY

THE PROCESS OF RESONANCE OF FOUR TRACK ATHLETES.....	45
Abstract.....	47
The process of resonance of four track athletes.....	48
Method	58
Participants.....	58
Interviews.....	59
Journal.....	59
Data analysis	60
Establishing trustworthiness	60
Results.....	61
Discussion.....	74
References.....	85
Figure 1 – Resonance Performance Model.....	92
Table 1 – Data Table.....	93

PART THREE: CONTRIBUTION OF COLLABORATORS

STATEMENT OF CONTRIBUTION OF COLLABORATORS.....	95
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PART FOUR: REFERENCES AND APPENDICES

REFERENCES	97
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APPENDICES	107
Appendix A – Ethics Document	107
Appendix B - Consent Form	110
Appendix C - Interview Guide Based on RPM	112
Appendix D - Resonance Journal Form.....	115
Figure 1- Resonance Performance Model (RPM)	118
Table 1 – Data Table.....	120

**PART ONE: EMPIRICAL, THEORETICAL,
AND METHODOLOGICAL CONSIDERATIONS**

INTRODUCTION

The purpose of this chapter is to introduce my thesis topic and give an overview of relevant research in the area of resonance and enjoyment in sport, as well as other performance domains. It will become evident that there are gaps in the literature and I will highlight how these gaps provided the rationale for developing and proposing the current study.

Daily living usually involves an assortment of activities that are commonly structured in some type of routine. Work, family, friends, recreation, and sport are generally integrated into a normal routine that we follow either because we have to or because it makes us feel good. However, it is a difficult task to feel good or to be in full control of our feelings in every daily situation. Some of us might not even know how we want to feel.

It is true that we do many things that make us feel happy, relaxed, and content. However, according to Maddux (1997), many of us seldom prepare to live this way regularly. Our daily lives are governed by routines and habits that don't inspire us and make us complacent, possibly inhibiting us to strive toward our actual potential as performing beings. It could be argued that we fall into the state of "going with the flow." We don't prepare a response to revisit the way we want to feel when difficult times arise. This is part of the reason for our emotional highs and lows. We lose touch with what facilitates a high or we become involved in activities or even with other people who commonly pull us away from the ideal way we like to feel. These ideal feelings become allusive. Essentially, we become invested in situations where control of how we feel is

relatively in the power of external sources. This notion of mindless reactivity within our environment prevents us from embracing our potential as emotional human beings.

The fact that some individuals do not practice or drop out of sports during their life leads one to believe that the importance of engaging in such activities for the purpose of feeling good or enjoying oneself is sometimes overlooked (Wankel, 1985). More specifically, Weinberg and Gould (1995) and Durand-Bush (2000) have shown that enjoyment is one of the most important reasons why individuals remain engaged in sports. Weiss and Chaumonton (1992) suggested that emotions such as excitement and pleasure positively influence participation motivation whereas negative emotions, like sadness and disappointment, work in a converse fashion.

Playing sports with the intention of enjoying oneself and feeling fulfilled can take some reflection and thoughtful planning but, when viewing it philosophically, experiencing these types of positive feelings on a regular basis should be everyone's main objective or focus in sport and any area in life. This is not to say that experiencing emotions like loneliness, sadness, or pain are terrible. One could argue that this balance adds to our individual growth as human beings. However, as mentioned, being able to access ideal feelings on a daily basis is a skill that can improve the quality of our experiences in sport and in our lives in general. It is a form of empowerment that could potentially have a strong influence on our overall well-being (Rejeski, Brawley, & Shumaker, 1996).

Csikszentmihalyi (1992) wrote that, "the bottom line of sport activity is the feelings it provides" (p. 181). He emphasized the importance of being in touch with what we are feeling during a performance and not being concerned with the outcome.

Csikszentmihalyi (1975) also stated that, “if everything we do is done in order to get material rewards, we shall exhaust the planet and each other” (p. 4). This can be linked to the reasons why some people play sports. Wankel (1985) examined the motives of young athletes for playing sports and found that they liked the social relationships, the good feelings they experience from playing, the organized nature of their program, and simply that the activity was interesting. Of particular significance, Wankel’s study illustrated that feelings are important to why young athletes play and stay in sport. More recently, the feelings that athletes experience in sport has received greater attention. Boyd, Trudel, and Donahue (1997) found that young hockey women had goals for playing but they also emphasized that they liked playing for the feelings it evoked. These feelings were had both a social (i.e., being with others) and a kinesthetic component (i.e., feeling of speed). Some of these feelings have been associated with the phenomenon of flow (Csikszentmihalyi, 1975; Jackson 1992, 1995).

Flow is the holistic sensation that people have when (a) they are totally involved or absorbed in an activity, (b) the performance feels effortless, natural, and automatic, and (c) time is distorted (Csikszentmihalyi, 1975). Jackson (1992, 1995) and Csikszentmihalyi reported that flow is a state that can be elicited under appropriate conditions. A few examples include being well-trained, maintaining appropriate focus, channeling energy, staying relaxed, and thinking positively.

Another concept that focuses on the feelings of individuals is “resonance” (Newburg, Kimiecik, Durand-Bush, & Doell, 2002). Resonance is described as a seamless fit between what occurs inside of individuals and what surrounds them in their external environment which allows them to completely connect to or engage in what they

do and derive pleasure and satisfaction from it. Resonance is at the core of Newburg et al.'s (2002) Resonance Performance Model (see Figure 1, p.113), which will be used in the current study. This model was developed based on in-depth, open-ended interviews with over 100 experts in a variety of fields including sport, sciences, music, medicine, and the performing arts. An important distinction between the ideal feelings of the concept of resonance and flow is that the feeling is experienced at a conscious level on regular basis. On the other hand, flow is experienced at a more subconscious level and most often occurs haphazardly. The RPM describes the process through which individuals typically go to experience resonance. Of particular interest is that it can be used to help individuals identify how they want to feel. These ideal feelings are highly individual as are the preparation and refocusing strategies that individuals use to reach them or what Newburg et al. (2002) describe as resonance. The model can be considered as a self-awareness tool that has the potential of helping individuals improve their performance and personal enjoyment of their sport experience. The RPM was developed based on the lives of expert performers thus it would be important to test it with athletes of varying levels to see if the process of resonance is mindfully considered and, in turn, how it affects performance and well-being. The RPM, which was used as the conceptual framework in this study, will be discussed next.

Conceptual Framework

The conceptual framework for this study is based Newburg et al.'s (2002) RPM which was the foundation for developing the content of the interviews and was used as a guide for the analysis of the data. Newburg et al.'s (2002) RPM has four major components (see Figure 1, p. 113). It is imperative to discuss each component prior to

introducing the related literature and methodology. The four components of the model are (a) the Dream, (b) Preparation, (c) Obstacles and (d) Revisiting the Dream.

The Dream. The “dream” represents the feeling that individuals seek when they engage in their particular sport. The dream is based on a conscious decision on how you want to feel on a regular basis in a particular context. It is not an outcome goal, nor a dream goal as defined by Orlick (1990), but an internal feeling that motivates a person to continue playing or performing an activity. In his research, Newburg (2001) found that the dream was fueled by an idea that “so captured (the participants) that they were willing to commit to making the expression of it their life’s work” (p. 6). Newburg postulated that the dream becomes the central reason why people engage in their chosen activity, however, the dream cannot exist without both freedom and responsibility. Newburg et al. (2002) wrote,

The dream cannot exist without both freedom and responsibility. The exercise of freedom and acceptance of responsibility drive the entire process of resonance. Performers who were interviewed were able to free themselves from pressure, fears, and distractions, and exercise their freedom to learn, make their own decisions, do the necessary work to develop exceptional skills, and enjoy themselves in this process. They balanced their freedom with the many responsibilities they had in order to be able to live their Dream on a daily basis. (p.9)

Newburg stated that self-doubt and anxiety exist because people do not free themselves to do what they want or what makes them feel good. Of course, this freedom

is not reckless since individuals still need to be responsible and take ownership of their actions.

Preparation. The next component of the model is entitled “Preparation” and involves all of the activities in which individuals engage to make the dream happen or bring out the feelings they desire on a consistent basis. Such activities may include physical, mental, and/or emotional training and strategies. A mental training tactic, for example, could be setting outcome goals that are in line with the dream, which provides a means for regularly living the dream. The preparation stage inevitably requires a strong commitment and self-confidence on the part of individuals.

Obstacles. According to Newburg (2000), the process of resonance is often disrupted by various obstacles. Obstacles can be encountered due to a good or bad performance, external sources like people or standards, and internal sources like self-doubt or anxiety. In order to live the dream, Newburg proposes that individuals must surpass obstacles when they appear but they must be careful not to get trapped in the “Obstacle-Preparation Loop.” He found that in the face of obstacles, individuals will often work harder and engage in more preparation rather than try to reconnect with the feeling that motivates them to do their chosen activity. This can cause them to lose touch with their dream, as they forget the ideal feelings they want when they perform in their domain. Newburg suggests that in order to resonate, it is important to revisit the dream on a regular basis, particularly in the face of obstacles.

Revisiting the Dream. The fourth component of the model, “Revisiting the Dream”, emphasizes the importance of getting back in touch with the dream. The expression of revisiting is unique to every individual but it is often a reflective period that

occurs after an obstacle has presented itself. Newburg (2000) reported that individuals can revisit their dream by engaging in other activities such as listening to music, going to a movie, calling a friend, talking to a coach or simply resting. This can result in a rekindled motivation to live their dream within their performance context and serves to break the obstacle/preparation loop that can be problematic. This part of the process is also important because it allows people to re-energize themselves before re-setting new goals or continuing to pursue the initial ones they already established. Newburg found that the result of going through this process of performance, that is, the four components of the RPM, leads to resonance. When this happens, individuals are aware and are able to connect their inner self with the demands of their environment and truly feel the way they want to feel.

Purpose of the Study

As previously mentioned, so many positive feelings or specific ideal feelings can be experienced in sport under appropriate conditions, whether the sporting activities are competitive or recreational in nature (Rejeski et al., 1996). However, many questions remain unanswered in terms of how these feelings are experienced, what facilitates the manifestation of these ideal feelings, and how these feelings can be maintained on a regular basis. Newburg's (2001) model of resonance is interesting and innovative and could shed more light on the importance of experiencing enjoyment in sport. It is a model that could be easily tested with not only elite performers but also athletes participating at different levels. Having said this, the purpose of this study was to empirically examine the process of resonance of four track athletes. More specifically, I attempted to answer the following research questions: (a) Why do track athletes participate in their sport?

What feelings do they seek when they perform their sport? (b) How can they experience those feelings regularly? (c) What inhibits them from experiencing positive feelings in their sport? (d) What strategies do they use to re-connect with positive feelings when they face obstacles? and (e) How do these feelings affect their performance and well-being? It was anticipated that the answers to these questions would vary but, fundamentally, there was an assumption that everyone plays sports because they enjoy themselves and that this enjoyment can contribute to their performance and/or well-being (Newburg, 2000; Rejeski et al., 1996). The specificities of their enjoyment and individual process of resonance need to be further understood as research is lacking in this area.

It is believed that this research will make a significant contribution to the literature from both a theoretical and applied perspective. From a theoretical point of view, Newburg's (2001) model that was inductively developed based on extensive and numerous case studies with accomplished performers, will be tested with less accomplished athletes. The resulting empirical database could serve to make future modifications to the model if needed and also to generate subsequent research. This study will also have several practical applications. Currently, there are no concrete strategies designed to facilitate the experience of resonance and enjoyment of those participating in sport. It is expected that this research will help to understand the processes involved and contribute to the development of a practical approach to help individuals resonate more consistently. The results could have implications in such fields as education, sport psychology, and sport pedagogy. The following section includes a review of literature relevant to the current research.

REVIEW OF LITERATURE

Empirical research on resonance, enjoyment, and emotions for high quality performance in sport is limited. However, certain key studies were found in the literature and deemed relevant for the current study. They will be described and critically analyzed in this section. The content will be presented following the four components of the RPM, thus each sub-section will highlight past work that relates to the Dream, Preparation, Obstacles / Setbacks, and Revisiting the Dream. It will become evident that there are gaps in the literature and that the current study will play a significant role in understanding if and how individuals experience resonance in sport. The first sub-section pertains to the “Dream” component of Newburg’s (2001) model.

The Dream

As previously mentioned, the dream represents how individuals want to feel when they engage in a particular activity (Newburg, 2000). Research on engagement, authenticity, flow, individual zone of optimal functioning, enjoyment, self-actualization and life span theory of control will be presented and an attempt will be made to show how these concepts can be linked to resonance.

Engagement. Maddux (1997) reported that happiness is a product of living in the moment and focusing on the process of any activity in which people engage. He discussed the differences between enjoyment and distaste of exercise and physical activity, arguing that enjoyment was fundamentally linked to perceptions of a mindful connection to the moment versus a mindless dissociation from the “work” involved. In fact, he stated that happiness or enjoyment is difficult to attain if people are “reliving the past or planning for, preparing for, and worrying about the future” (p. 341). He noted that

focusing on the process holds more importance for happiness and enjoyment than does a concern for the outcome of the activity.

Debats, Drost, and Hansen (1995) conferred about the meaning of experiences and reported that there has been a general preference for quantitative data rather than gathering subjective experiences. They also contended that there is, “a clear pattern within experiences of meaningfulness of active engagement and commitment...” (p. 371) and as a result stated that “meaningfulness is essentially connected with a state of being in contact” (p. 371).

Being engaged in the moment and being self-aware are important factors to enjoyment. Maddux (1997) extended the notions of being process or moment-oriented and described how an individual’s concern with the future is the foundation for forming unhealthy habits. He explained that some people believe that, “because the value of an activity is to be found primarily or even exclusively in what it promises for the future, and because it is painful or unpleasant or bothersome, there is no reason to pay attention to it while doing it...” (p. 342). Moreover, for some people, enjoyment results in the accomplishment or completion of something. Thus, enjoyment is not experienced as often if people are too outcome oriented and do not find pleasure or satisfaction during their performance. Maddux’s ideas introduce interesting elements to the notion of enjoyment but, unfortunately, he does not make practical suggestions for helping individuals increase the level of enjoyment in their activities. Furthermore, his research is based on enjoyment in life in general and does not identify specific factors that could be particularly important in the domain of sport.

Engagement is fundamental to the expression of the dream. Being engaged in the present seems to be important to living positive feelings regularly and, as Maddux (1997) described, precedes positive experiences.

Authenticity. Erikson (1959) theorized that we progress through four stages of development as adults that is, identity, intimacy, generativity, and integrity. The final two stages manifest our innate desires for meaning in life which is exemplified in meshing our work to our inner calling to live authentically or be our true selves. In other words, we have a drive to freely express ourselves through our activities. Treadgold (1991) revealed that a mid-life crisis possibly results when a reflection on the meaningfulness of past living is conducted. This often results in life change that contributes to finding more authentic expressions such as seeking out a dream job. Treadgold found that clarity of self-concept or authenticity was positively linked to meaningful engagement and he further discussed that involvement in meaningful vocations is related to a more stable image of the self. Waterman (1993) posited that situations that are engaging promote intense feelings of being alive and are authentic expressions of one's self.

Authentic living could also be described as a melding of the ideal and real self, that is, the way people want to be and how they perceive themselves at any moment. Self-discrepancy in this regard has been linked to poorer well-being. Moreover, the greater the discrepancy between one's real-self and ought-self, the less mentally healthy the individual will be (Higgins, 1987; Strauman, 1989). More specifically, real-ought discrepancies often result in feelings such as fear, worry, or anxiety (Higgins, 1987). In one particular study, individuals who were preoccupied with their ideal self also felt anxious, self-conscious, and vulnerable (Bybee, Luthar, Zigler, & Merisca, 1997).

Authentic experience is a factor contributing to well-being but it may also lead to higher quality of performance. Of particular interest, McCrae and Costa (1994) suggested that our traits may represent “our very selves” (p. 175). Hassmen, Koivula, and Hansson (1998) stated that inconsistencies in performance may be partly due to the failure to account for the influence of stable psychological traits. In other words, performance may be influenced by an individual’s trait characteristics. Sheldon, Ryan, Rawsthorne, and Iladi (1997) found that “fluctuations in felt authenticity were associated with variation of trait scores in different roles...” (p. 1286). This means that some of the different roles or situations in which we become involved are closer matches to who we are than others. The mismatches create discomfort. It could then be argued that, in certain cases, feelings of non-authenticity during performance might contribute to inconsistent performance because they elicited unwanted feelings (e.g. high anxiety) or are disengaging. This could translate into poorer psychomotor control or reduced motivation toward the performance of the activity.

Engagement and authenticity can be construed as fundamental components of living ideal experiences and experiencing resonance. Specific research on positive experience includes work on the concepts of flow, the Individual Zone of Optimal Functioning, enjoyment, self-actualization, life span theory of control. These concepts can be linked to the Newburg et al.’s (2002) RPM.

Flow. Flow has been studied in sport and can be described as a state during performance where there is a loss of self-consciousness, feelings of control, a perceptual transformation of time, and where individuals are totally absorbed in the activity (Csikszentmihalyi, 1975). It is a contributor to positive affect and, according to Diener,

Sandvik, and Pavot (1990), the more often people are in flow, the happier or the more enjoyable their experiences will be. However, both Csikzentmihalyi (1975, 1999) and Jackson (1992) found that this type of enjoyable experience is difficult to predict or control.

Jackson (1992) qualitatively studied flow with figure skaters and found that approximately 50% of the sample said that it was not possible to control it. Those who did believe it was controllable said that being well-trained, maintaining appropriate focus, channeling energy, staying relaxed, thinking positively, and enjoying what they were doing were all factors that were under some form of personal control and contributed to flow. Most strikingly, Jackson found that 81% of the skaters said they did not experience flow very often. An important point mentioned is that flow could have been interpreted and described differently by different skaters.

In a subsequent study, Jackson (1995) found that 79% of the athletes perceived flow to be somewhat controllable in that they could “set it up” as a part of their preparation. However, as one athlete described, the controllability of flow is “a battle between your conscious and subconscious” (p. 158). It seems that there is a gap between believing these feelings can be controlled and actually having the means to control them. This would suggest that there is a need to further understand if and how the frequency of ideal feelings related to flow can be increased and controlled. In 1996, Jackson and Marsh revised the aforementioned list of facilitating factors and included a balance of challenge versus skill, a merging of awareness and action, clearly set goals, unambiguous feedback from the activity, total concentration on the task, a sense of control, a loss of self-consciousness, and intrinsic motivation.

These aforementioned studies highlight three points relevant to the current research. First, they indicate that athletes may feel that flow is a haphazard condition that is difficult to control. Second, flow is quite possibly a very individual, personal feeling and experience. Third, flow experiences are most likely interpreted differently by every person. This means that strategies to facilitate this experience might require an individually tailored approach. If flow experiences are an element of enjoyment in sport, then it would be appropriate, from an applied perspective, to understand how individuals come to experience it so that every attempt can be made to increase its manifestation. The strategies that athletes use to reach flow are important and a conscious awareness of these strategies could lead to a more consistent achievement of this state.

With regard to Newburg's (2002) RPM, reaching ideal feelings during the process of performance requires a level of self-awareness whereby performers are knowledgeable of the difference between what they are actually feeling and how they want to feel. Again, this is a potential strength of this model as it advocates the controllability of feelings during any type of performance. Athletes who experience flow could get disrupted and lose their ideal state whereas those who understand the principle of resonance might potentially have more skills or strategies to regain a positive feeling (the dream) in the face of obstacles, based on their awareness of their personal process of resonance. This level of self-awareness could possibly be a strong link to greater consistency of performance as it has been shown that resonating (Newburg, et al., 2002) and being in flow (Jackson, 1992) positively affect performance.

Individual zone of optimal functioning. Hanin's (1978, 2000) theory of Individual Zones of Optimal Functioning (IZOF) describes the relationship between individual

psychobiological states and performance. Hanin (2000) suggests that an optimal performance state “provides the best internal conditions, resulting in a total involvement in the task...” (p. 67) and focuses on “within-individual dynamics of subjective emotional experiences accompanying successful, average, and poor performances” (p. 66). Being in the zone is equated with being highly engaged which is, in essence, what individuals experience when they experience their dream. However, as IZOF may be a sought after state in performance contexts, the concept of resonance can encompass optimal performance states and other experiences in all areas of living. It should be emphasized that sport is only one area.

The IZOF theory is used to discuss optimal states in reference to the degree of arousal experienced while performing. According to Hanin (2000), individuals perform better under certain levels of arousal. However, the IZOF theory has been more broadly refined to include positive and negative emotions and their relationship to performance functionality. Syrja, Hanin, and Pesonen (1995) found that 88.2% of “poor” performers were outside optimal zones before their soccer game and also failed to enter their optimal zone during their performance. Similarly, only 62.5% of successful players showed they were able to maintain their ideal level of arousal, staying in their zone. Thus, this form of arousal and engagement seemingly has a positive effect on performance.

Similar to the dream, “the zone” is a very individual state. Theoretical applications of the zone have indeed shown relationships with outcomes but only describe the relationship between feelings and researcher-defined outcome criteria. Although the IZOF model has contributed greatly to the understanding of emotional states and performance, it is primarily focused on outcome, which is not individually

defined and often out of people's control. A degree of subjectivity of success has been missing in the research on IZOF. Participants have had performance success or goals determined for them. In the case of resonance, the feelings the performers sought to experience were identified out of their own volition. Thus, quality of performance was judged not based on external outcomes but the level of engagement and intrinsically motivating feelings they experienced throughout their lives. It seems proper to consider how this process relates to performance.

Enjoyment. As research has evolved to include antecedents, facilitators, and disrupters of ideal states, expanding the notion of enjoyment of sport and physical activity has become an issue. Kimiecik and Harris (1996) proposed flow to be a working definition of enjoyment, that is, when athletes experience flow, they unequivocally enjoy themselves. Kimiecik and Harris also established that enjoyment is not a result of something but rather an engagement in the moment. Again, enjoyment has been described in a general manner and the nature of how athletes come to "enjoy" themselves while competing or training is unclear. It could be argued that athletes enjoy themselves when they experience flow and that they experience flow when they enjoy themselves (Jackson, 1995). However, it might be best to separate enjoyment and flow because they might involve different mindful and mindless processes (Maddux, 1997).

Kimiecik and Harris' (1996) depiction of enjoyment was scrutinized by Wankel (1997). At the forefront of Kimiecik and Harris' argument was the fact that there is a lack of a clear definition of the feelings of fun, satisfaction, and enjoyment. The concept of enjoyment is difficult to study, they argue, without a clear a priori definition. Wankel contrarily responded by writing that personal definitions are important. He wrote: "Our

research has led us to believe that different individuals indeed had different views on ‘what was fun’” (p. 100). Newburg (2000) found similar results in his research. The individual interpretations people have about such subjective terms such as fun, satisfaction, and enjoyment are accounted for in the RPM. Each individual has the opportunity to define, for himself or herself, what is enjoyable about performing in sport. Wankel reported that “positive affect or feelings is the essential underlying component to all exercise enjoyment experiences” (p. 101). The bottom line is that the dream equates to a feeling that is identified or recognized as the way someone wants to feel when they perform. The feeling elicited during physical activity is only a dream feeling if a choice is made to work to live this feeling on a regular basis. It is an ideal feeling until a conscious choice is made to seek it regularly, thus making it a dream feeling. This is an important distinction in relation to the conceptual debate in the literature within the area of enjoyment.

Kimiecik and Harris (1996) stated that, from a research perspective, “we still don’t really know what fun is...” (p. 250). The current study seeks to further understand the concepts of enjoyment, fun, and satisfaction in sport. However, from an applied perspective, investing energy into depicting such differences between these concepts may be misdirected. It could be argued that cultivating the personal feelings individuals wish to experience is important. These feelings have personal meaning. It is irrelevant to understand if they can be categorized as enjoyment, fun, or satisfaction. It is more important that strategies be available for them to feel good as often as possible. It appears that some researchers are struggling with semantics. Nevertheless, Newburg’s (2001) RPM allows individuals to personally define enjoyment and, most importantly,

help them to develop strategies to consistently experience their desired feelings within their performance context. In fact, resonance might be an applicable term to represent the process of how ideal feelings are monitored and continuously sought when they participate in sport, whether these experiences resemble fun, enjoyment, or satisfaction.

Self-actualization. Self-actualization is another concept that relates to resonance. According to Rogers (1961), behavior reflects efforts to “express and actualize all the capacities of the organism” (p. 351). The expression of ideas and capacities is, according to Newburg et al. (2002), a fundamental aspect of performance and resonance. Maslow (1971) postulated that a hierarchy of needs exists that precedes self-actualization. He termed momentary high points as peak experiences that represent the best in all of us. These moments are flashes of actualizing. Ultimately, a person who is self-actualizing is optimally adjusted and fully functioning. Maslow (1971) wrote that self-actualizers are devoted markedly to a task that is “outside themselves” (p. 291) and that this task or activity is, “...something for which the person is a ‘natural,’ something he is well-suited for, something that is right for him, even something that he was born for.” (p. 291). In essence, people who are self-actualizing are engaged in the activities that allow them to authentically express themselves. A focus of humanistic approaches to therapy is to help clients achieve actualization through self-awareness and meeting needs. Much of the satisfaction of needs would situate under the preparation component of the RPM. Failing to meet certain needs would surely make the dream more difficult to experience. Rogers (1951) argued that the innate tendency toward self-actualization affects life choices as affect becomes a key regulator.

Life span theory of control. At the core of Newburg's (2001) RPM is the idea that it is important to control personal emotions and experience ideal on a regular basis. Heckhausen and Schulz (1995) discussed how we act to control the way we want to live through primary and secondary control behavior. Primary control behavior refers to "behaviors directed at the external environment and involves attempts to change the world to fit the needs and desires of the individual" (p. 284). Secondary control behavior refers to "internal processes (that) serve to minimize losses in, maintain, and expand existing levels of primary control" (p. 284). Heckhausen and Schulz also wrote that important events in an individual's life increase, decrease, or threaten levels of control.

Rothbaum, Weisz, and Snyder (1982) defined primary control as bringing the environment into line with one's wishes and secondary control as bringing oneself in line with the environment. Of interest is that the Life-Span Theory of Control has not been studied in a sport context. Resonance can be linked to this theory, however, Newburg (2000) described resonance more generally as a seamless fit between what people feel inside them and what surrounds them in their environment. The RPM is an indirect application of the mechanisms of primary and secondary control because it advocates identifying what elicits feelings of control and lack of control. A lack of control could occur at all of the stages, that is the Dream, Preparation, Obstacles/Setbacks, and Revisiting the Dream stages. One could argue that the preparation component of the model helps individuals to strategize methods to craft their environment to bring it in line with them in order to be able to resonate. On the other hand, Revisiting the Dream allows them to bring themselves in line with their environment when there has been a disruption of resonance. One could argue that individuals could also bring their

environment in line with them if the distraction is external. Either way, the model enables individuals to gain control through primary or secondary control behavior.

Preparation

The following section focuses on research pertaining to preparation or training to experience resonance and peak performances. It is not possible to consider all of the means by which individuals may prepare to live their dream, therefore, this section will introduce some of the key principles that have been found to facilitate ideal feelings while performing. These areas include: (a) motivational disposition, (b) goal orientation, (c) social factors, (d) training, and (e) mental training.

Motivational disposition. Upon examining affective outcomes in competitive youth sport, Brustad (1988) determined that an intrinsic motivational orientation was the strongest predictor of enjoyment for both boys and girls. Moreover, those who preferred challenging tasks experienced higher levels of enjoyment. Brustad stated that “children with an intrinsic motivational orientation should have a greater likelihood of experiencing positive affect... because they are more likely to encounter opportunities for optimal challenge” (p. 318). This finding is associated with Harter’s (1978) competence motivation theory, which proposes that a high level of perceived competence and feelings of internal control over outcomes in an achievement domain should increase the likelihood of positive affect. Harter found that intrinsic motives like curiosity or the desire for challenge enhance the likelihood that positive affect will follow. On the other hand, low levels of competence can yield feelings of frustration, shame, or anxiety. Obviously, in most cases, these are feelings that athletes do not seek or at least try to avoid during their sporting experience. The RPM (Newburg, 2000) seeks out the intrinsic

reasons why individuals participate in sport. Based on Brustad (1988) and Harter's (1978) findings, the model could be effective in helping people to establish these reasons to increase positive affective experiences.

The concept of achievement motivation is also highly related to Newburg's (2000) RPM. The achievement goal theory states that the primary goal of an individual in an achievement context is to demonstrate high levels of competence while avoiding demonstrations of inability (Nicholls, 1984). Task oriented individuals focus on their own development and comparisons are more internally focused whereas ego oriented individuals are more concerned with comparisons with others or outside standards. In a sporting context, it could be argued that task-oriented athletes may be more likely to live and control their dream because they focus on themselves. By continually comparing their personal experiences, they would likely be in a better position to know when they are not feeling the way they like to feel and make appropriate adjustments. It would be interesting to empirically verify this.

Lochbaum and Roberts (1993) determined that, in regard to achievement contexts, task orientators behave more adaptively than ego orientators. More specifically, task orientators believe that success is a product of effort and persistence and they engage in self-referencing to determine whether or not they are performing well. Ego orientators believe that success is normative and they make comparisons to others or external standards. They tend not to exert effort or persistence. Lochbaum and Roberts stated that, "in the face of difficulty or failure, these athletes are less likely to persist and demonstrate motivation" (p. 169). This is relevant to Newburg's (2000) model because, as Lochbaum and Roberts illustrated, when individuals have a task orientation that is ultimately process

focused, achievement strategies are assumed to be under their personal control.

Lochbaum and Roberts concluded that process-oriented athletes would be expected "... to exert effort and be persistent... This orientation lends itself to motivated behavior and satisfaction with the sport experience" (p. 169). A fundamental tenet of the RPM is this process – oriented focus, which is believed to lead to enjoyment, satisfaction, sustained engagement and, subsequently, resonance.

Goal orientation. Goal orientation and motivation are conceptually linked. Past research on process goals indicate that a process orientation can lead to the "automation of performance" (Kingston & Hardy, 1997, p. 279) and the reduction of anxiety surrounding performance (Kingston, Hardy, & Markland, 1992). As Kingston and Hardy illustrated, this orientation brings the individual's focus into the moment and can provide an increase in perceptions of control. They concluded that "process goals per se clearly contain information that might enhance attentional focus" (p. 289). The RPM (Newburg et al., 2002), in its entirety, could act to increase attentional focus through its process orientation as well. The increase in self-awareness that it provides could be important for gaining feelings of control and to eliminate concerns or worry outcomes or the future.

Shakarian (1995) found that goal orientation was highly related to achievement motivation. He defined mastery goals as goals that focus on developing new skills or mastering a task, and create a base success for individuals through a self-standard of improvement. Thus, mastery goals provide a stronger focus on the process and on self-improvement. On the other hand, competitive goals foster feelings of success based on comparisons to others in a peer group. These goals have a more external focus. Research on goal orientation has shown that process goals contribute to long term achievement,

enjoyment of the activity, reduced feelings of boredom (Duda, Fox, Biddle, & Armstrong, 1992; Treasure, 1997), greater task persistence (Rudisill, 1989) and overall performance (Burton, 1989). It is noteworthy that Newburg et al. (2002) advocates a process orientation in all of the components of the model. More specifically, Newburg suggested that mastery goals that are conducive to living the dream are types of goals that should be set in the preparation stage. These goals should also be used as reminders and guides to feel good or to resonate on a regular basis

Social factors. In addition to goal setting, social factors can also influence the preparation of athletes to live their Dream. The enjoyment of an activity often has a strong social component. Wankel (1985) found that, in an exercise context, focusing on enjoyment by developing a social network was important to adherence. Conversely, he found that participating in an activity for external reasons like losing weight was too externally oriented. Generally, individuals who exercise only for health reasons will have more difficulty sustaining a consistent routine because the element of enjoyment is more difficult to establish. Wankel stated that "...factors beyond the desire for improved health or fitness are central to whether or not an individual will remain active in an exercise program" (p. 281). In sport, Boyd et al., (1997) found that spending time and socializing with teammates is a key contributor to the overall enjoyment of young women ice hockey players.

In other studies, coaches have been found to play a strong role in the enjoyment of sport and the preparation of athletes (Black & Weiss, 1992, Durand-Bush & Salmela, 2002; Salmela, 1996; Weiss & Friedrichs, 1986). In a study of 9 to 14 year old male wrestlers, Scanlan and Lewthwaite (1986) highlighted specific predictors of sport

enjoyment. More positive feedback from coaches, less maternal pressure, fewer negative performance reactions, and more adult supportive involvement were linked to high reports of enjoyment. Enjoyment, in this case, was defined as fun and the degree to which the young athletes liked to wrestle. This study indicated that there are social factors within the external environment that influence the level of enjoyment that individuals experience. Newburg (2001) postulated that the RPM helps to identify the social factors that facilitate living the dream. He advocates including or seeking out social elements that will help people feel the way they want and, conversely, avoid or cope with negative social factors (external obstacles).

There are other significant others, aside from coaches, who can have a positive impact on the feelings and preparation of athletes. Rosenfeld, Richman, and Hardy (1989) and Durand-Bush (2000) described how coaches as well as teammates, friends, and parents can be providers of different types of support. In addition, Rosenfeld and Richman (1997) showed that fostering a feeling of group cohesion through team building can facilitate feelings of support, positive outcomes in physical fitness and health, reduce stress and loneliness, and prevent burnout. Thus, it could be argued that a positive social atmosphere could be an important facilitator of living the dream and a buffer of potential obstacles that could prevent athletes from feeling the way they want in their performance domain.

Training. Another factor that plays an important role in the preparation of athletes is training. Ericsson, Krampe, and Tesch-Römer (1993) found that deliberate practice or effortful and conscientious training is a significant contributor to the development of high performance. They found that improvements were manifested when performers engaged

in well-defined tasks with appropriate difficulty levels, informative feedback, and opportunities for repetition and error correction. According to Ericsson and colleagues, deliberate practice, which is the engagement in repetitive drills for skill acquisition or refinement, is not necessarily motivating or enjoyable, but is necessary for individuals to attain expert status in their performance domain. According to Harter (1978), feeling competent is linked to being physically prepared. Also, competence is important for the enjoyment of a sporting experience but deliberate practice, as Ericsson and colleagues explained, is not always enjoyable. The process of becoming competent to perform a desired skill then elicits feelings that athletes do not necessarily want to experience. However, some researchers have recently found that certain types of deliberate practice are enjoyable (Durand-Bush & Salmela, 2002; Young & Salmela, 2000). Deliberate practice might be an obstacle in the process of resonance but can the process of deliberate practice be more enjoyable? If so, it could be hypothesized that there would be many more experts in our society as fewer individuals would not drop out along the way. Nevertheless, due to the fact that deliberate training activities are generally not significantly enjoyable, it is important for performers to include activities in their training and life that are enjoyable so that they can experience positive feelings on a regular basis (Durand-Bush, 2000). Engaging in the process of resonance could help individuals achieve this.

Mental skills. The development and practice of mental skills is a crucial preparation component for performers. Athletes who are not only physically but also mentally prepared are able to free themselves from any worries or concerns to focus on their performance (Durand-Bush & Salmela, 2002; Newburg, 2000).

Mental skills have been shown to be important elements of positive responses to stress (Anshel, 1990; Orlick & McCaffrey, 1990). Lazarus (2000) emphasized that athletes' self-knowledge about their Individual Zone of Optimal Functioning (Hanin, 2000) is important for gaining consistency within performance. Lazarus indicated that understanding and managing emotions surrounding and within a performance are important links to performance consistency. He listed anger, anxiety, guilt and shame, relief, happiness, and pride as emotions that can occur during a performance. Lazarus posited that in order to perform at their highest level, athletes need to be able to clear their mind of negative thoughts and replace them with positive ones. Coping skills, he said, are a big part of performing successfully. However, he contended that there is still little concrete evidence of how emotions affect performance. More research should focus on examining the relationship between emotions and sport performance.

Obstacles

Mental skills are important for preparing to consistently live the Dream, however there are also many obstacles or barriers individuals may encounter that disrupt the onset or continuance of ideal feelings. Even the most elite athletes encounter obstacles in their performance context and personal life. In fact, Newburg et al. (2002) found that there are always obstacles along the path to resonance. The following section reports some of the possible disruptions athletes may face at any level.

Disruptions in flow. Jackson (1995) highlighted general factors that not only facilitate but also prevent and disrupt flow. These latter factors include a lack of motivation to perform, non-optimal arousal level, problems with pre-competitive preparation, non-optimal physical preparation and readiness, non-optimal environmental

and situational conditions, poor performance, inappropriate focus, low confidence or negative attitude, and negative team play or interaction. When these factors present themselves, Jackson suggested that a state of flow is difficult to achieve. The aforementioned factors could be equated to possible obstacles on the path to experiencing resonance during a performance as well.

Jackson (1995) also identified factors that break flow during the experience. These factors include problems with physical state, non-optimal situational factors, inappropriate focus, self-doubt, and problems with team performance or interactions. Newburg et al.'s (2002) RPM is more focused on understanding obstacles at the individual level to help athletes or performers better prepare to live their dream on a regular basis. Jackson may have identified factors that could also be applied to the process of resonance. Again, flow is a specific feeling that accompanies sport experiences but its controllability is questionable. Having said this, some athletes may or may not deem flow and its characteristics as the feelings they want to experience on a daily basis because these feelings are not controllable and occur more at a subconscious level.

Social factors. As described in the Preparation section, social factors may help athletes' to experience positive performances but they may also hinder it. Coaches (Salmela, 1996; Scanlan & Lewthwaite, 1986; Weiss & Friedrichs, 1986), parents (Côté, 1999; Greendorfer & Lewko, 1978), peers and teachers (Weiss & Barber, 1995) can cause frustration and are all in a position to influence the continued participation and overall experience of individuals in sport. Thus, their role in fostering enjoyment and satisfaction is important and should not be underestimated. The RPM can help athletes to

target potential social conditions or individuals who nurture their experience of resonance and, conversely, who disrupt it.

Anxiety. Puca and Schmalt (1999) studied motivation in athletes and found that some of the participants in their study exhibited approach-oriented behaviors to an activity, that is, they sought success rather than avoided failure. Puca and Schmalt also found that these athletes reported higher levels of task enjoyment than those who displayed a more avoidance orientation, or a fear of failure. They stated that a fear of failure “disrupts concentration and may give way to the intrusion of self-related or task-irrelevant cognition while performing...” (p. 17). They continued by saying that this fear is, “... likely to disrupt cognitive resources that are necessary for optimal performance” (p. 17). Thus, the type of behavioral approach that athletes adopt can help or hinder their focus, engagement, and overall enjoyment of sport or exercise. Rotella and Lerner (1996) discussed how there is a negative relationship between worry and motor task performance as well as athletic performance. They posited that for many athletes, anxiety disrupts performance and that mental skills training is an important strategy to respond to it positively. They reported that a positive philosophical view or perspective of performance is the best approach to managing stress and competitive pressure. In relation, Newburg (2000) said that people who do not live their dream are more likely to be anxious.

Revisiting the Dream

The last component of the RPM pertains to revisiting the dream. Various concepts can be linked to this component to clarify Newburg’s (2000) original interpretation.

Some related concepts include, rest/recovery, perspective, and balance.

Balance. Many similarities can be drawn between the concept of “Revisiting the Dream” and refocusing in the face of distractions or obstacles (Orlick, 2000). Orlick (1998) emphasized the importance of establishing a balance between the gold zone, that is, people’s performance domain, and the green zone, that is, other areas in their life. Both zones influence each other, as Orlick (1998) wrote, “what we do with our time away from our work or performance domain directly affects the quality of our work and the level of our performance” (p. xi). Orlick emphasized that connecting with others and having positive communication within relationships in the green zone is important to performing well in the gold zone. Relationships can also play a valuable role in the Revisiting portion of the process of Resonance.

Rest/recovery. Other studies have shown that performers need to balance the amount of effort and energy they spend in their performance domain with adequate recovery periods to prevent overtraining, staleness, and burnout (Ericsson, 1996; Morgan, Brown, Raglin, O’Connor, & Ellickson, 1987). Morgan et al. found that as athletes become overtrained, they can experience psychological and physiological disturbances. Thus, it is important to use the time away from the performance domain for proper rest and recovery to maintain physiological and psychological readiness.

Perspective. Botterill and Patrick (1996) discussed how maintaining perspective is also a crucial element to enjoying being an athlete and to refocus in the face of distractions. They stated that taking time to reflect on the meaningfulness of personal actions and to relax away from the performance domain when the opportunity arises is important to performing well. According to Newburg (2000), a loss of perspective or a confrontation with obstacles, requires individuals to seek out experiences that promote or

trigger the idea of how they want to feel as performers. This process can help them overcome the obstacles, get back in touch with their dream, and re-discover ways to prepare to have this feeling on a regular basis.

Thus, rest, balance, and connecting with significant others seem to be factors that can be linked to Revisiting the Dream. Investing time to reflect or re-energize oneself, engaging in positive self-talk, and performing innovative activities are other strategies that were found to be important for Revisiting the Dream and for staying positive and motivated (Durand-Bush & Salmela, 2000). Newburg's (2001) process of resonance can help athletes mindfully strategize or prepare to achieve their desired feelings when they train or compete. Competitive anxiety might be one of the areas of concern in their path to resonance. Revisiting strategies are important to overcome obstacles that do not promote the dream feeling. The model could be an important tool for empowering athletes to become aware of these concerns and giving them a greater sense of control over how they feel when they engage in their sport. Very little research has focused on identifying concrete or practical approaches to helping individuals mindfully engage in their daily tasks and achieve enjoyment in sport and physical activity. The RPM is oriented toward making these heightened, ideal feelings more available to people. It provides a means for individuals to become self-aware of what they can do to consistently achieve these feelings and, more importantly, to be mindful of living in the moment on a daily basis. Once again, more research needs to be conducted with Newburg et al.'s (2002) model to determine how it applies in different sport contexts and how strategies can be developed to help individuals experience resonance on a regular basis.

The following section, the methodology, will describe how the RPM will be used to achieve the aforementioned research objectives of this study.

METHODOLOGY

This section describes the methodology that was used to conduct the current study. More specifically, it summarizes the proposed research paradigm and provides information on the participants and procedures that were followed to collect and analyze the data, including interviewing, journaling, and establishing trustworthiness. The research paradigm that was chosen to guide this study will be discussed first.

Research Paradigm

This research can be classified under the postpositivist paradigm. The selection of the postpositivist paradigm was based on the research questions as well as the type and design of the study. Upon review of three research paradigms (i.e., positivist, postpositivist, and constructivist) discussed by Guba and Lincoln (1985), it became clear that the postpositivist paradigm was the most appropriate to answer the research questions. The rationale for choosing this paradigm is that from an ontological perspective, this study is based on the fact that “reality must be subjected to the widest possible critical examination in order to apprehend it as closely as possible, but never perfectly” (Guba & Lincoln, 1985, p. 7). From an epistemological perspective, this study is also based on the fact that the researcher and participants are more or less dependent individuals who influenced each other to a certain extent during the investigation process. However, objectivity was emphasized by discussing the findings in relation to pre-existing knowledge and submitting them to a critical peer review. Furthermore, special procedures were used to maximize the trustworthiness of the study. These procedures are described in a subsequent section. Finally, from a methodological perspective, the postpositivist paradigm was chosen because it supports the use of both quantitative and

qualitative data collection methods in natural settings, as well as inductive and deductive data analysis designs. Both quantitative and qualitative methods were used in the current study to collect the data. Also, a deductive / inductive design guided the analysis.

Fundamentally, this study is deductive in nature because Newburg et al.'s (2002) RPM was used to structure the interview questions and was subsequently used to help categorize the participants' responses. Yet, within this deductive framework, the analysis was inductive as any new information was allowed to emerge from the interviews and journals of the participants.

Interviews

As previously mentioned, this study was designed based on Newburg's (2001) RPM, which was discussed in detail in the literature review. This model was the conceptual framework from which the general research questions and interview guide were developed. This framework also served as a basis for discussing and linking the findings of this study to pre-existing knowledge. The general research questions framing this study as well as the specific interview questions (see interview guide in Appendix B) were based on the four components of Newburg's RPM, that is, the Dream, Preparation, Obstacles, and Revisiting the Dream. Probing questions were also included in the interview guide in order to help the interviewer expand on or clarify certain points when needed. The interview guide contained open-ended questions that were posed to the participants in an attempt to examine, in a flexible manner, if and how they experienced resonance.

Participants

Huberman and Miles (1994) reported that *qualitative* researchers should not be driven by a concern for “representativeness” when selecting participants. They stated the importance of carefully sampling participants who will be suitable for the investigation of the phenomenon of interest. Having said this, the participants in this study were four female track athletes from the Ottawa Lions Track and Field Club, who were actively involved in their competitive track season. These four athletes primarily participated in the 800 meter distance event. Each participant satisfied the selection criteria of being at the specializing stage of participation (Côté & Hay, 2002). Côté and Hay created a model depicting various stages of participation in sport.

Athletes in the specializing years have narrowed their focus on one or two specific sports. They are committed to the development of specific sport skills through more structured and extensive practice, in comparison to individuals in the sampling years who participate in various sports merely for the fun of it. The athletes in the current study had to meet the criteria of being in the specializing years of participation.

The age range of the participants in this study was between 16 and 17 years with a mean age of 16.5 years. These individuals were chosen based on their willingness and availability to participate in the study and their level of involvement in their competitive season. They were recruited via a contact person at the Ottawa Lions Track and Field Club. This contact person was a member of the club throughout her life and helped the researcher to gain entry and meet potential participants.

At the onset of the study, the researcher met with all potential participants (N = 4) to discuss the study and the commitment required to make it successful for both them and

the researcher. A consent form approved by the Research Ethics Board of the Social Sciences and Humanities of the University of Ottawa (see Appendix A) was given to them and those agreeing to participate were asked to sign it before their initial interview was scheduled.

Data Collection and Analysis

The following section discusses the procedures that were used to gather and analyze the data. The interview procedure, journal description, and data analysis were prefaced by my past work on a pilot project related to Newburg's RPM (2001), which was an important part of my preparation.

Researcher Preparation

In preparing to conduct this project, one of my responsibilities was to acquaint myself with the RPM (Newburg et al., 2002) and the interview process. After designing an interview guide, I conducted four practice interviews with recreational athletes. After this experience, a formal pilot study was developed and implemented (see next paragraph). In addition, Dr. Doug Newburg visited the University of Ottawa last March to discuss the nuances of the RPM and fielded any questions I had on conducting interviews using the model. Dr. Newburg allowed us to observe a sample interview that he, himself, conducted. These activities helped me to gain confidence in my ability to gather information from participants. It also confirmed my understanding of the model and minimized many of the concerns I had with this research project.

As previously mentioned, my preparation also involved participating in a structured pilot study in which I conducted interviews with three competitive athletes in their specializing years, that is, one cross-country skier, one water polo player, and one

mountain biker (Doell & Durand-Bush, 2001). This allowed me to test, refine, and become skilled at using the interview guide as well as continue to learn the dynamics of interviewing. This pilot exercise also helped me to learn the technical operation of video and audio equipment. Each interview was debriefed with my thesis advisor and peers through video analysis, in order to help refine my interviewing skills and the interview questions. For example, in my first pilot interview, I followed every step of the interview guide in the order that the questions were presented and I also took a lot of notes. After the peer debriefing session, it was concluded that it was more important to ask general questions first and to only use probe questions if necessary. Remaining flexible with the order of questions and being careful to not break the flow of the interview by taking too many notes were also valuable lessons.

Another important project that contributed to my preparation for this research project involved conducting an interview with an athlete using the RPM for the course APA 5311. This, in itself, was a pilot project on the effectiveness of journaling, which, in turn, spurred the idea of using a journal to collect data in the current study. Keeping a journal has been shown to be an effective strategy for enhancing and self-monitoring one's performance (Zimmerman & Kitsantas, 1997) and was used to empirically monitor the experiences of resonance of the participants over time.

Interview Steps and Procedures

Upon gaining access to the four track athletes through a personal contact, individual information sessions were scheduled with them to (a) discuss the project, including general procedures and the level of involvement asked of each participant and (b) sign the consent form. The first interview was scheduled at the end of each

information session at a date and time that was convenient for both the participant and the researcher. The three subsequent follow-up interviews were scheduled at the end of the first interview. A total of four interviews (excluding the preliminary information session) were conducted with each participant over a period of 10 weeks. Furthermore, an additional three days were taken at the end of the journaling period to analyze the entries for the entire period prior to the final follow-up interview.

First interview. The purpose of the first interview was to examine if and how the participants experienced resonance in their sport and daily life. The participants were asked questions based on Newburg's RPM (see Figure 1) and, as a result, a personal model of their process of resonance was created. This model was inserted as the first page of the journal they subsequently kept over the period of the study. The steps for completing the journal are described at the end of this section.

The first interview was in-depth, semi-structured, and open-ended. At the beginning, the participants were asked informal questions in an attempt to create a positive and trusting atmosphere. They were then asked general questions about the process of resonance and were allowed to talk as much as they wanted about the topic. The interviewing process was flexible so that the flow of information provided was not interrupted.

Various probe questions were prepared and were asked to clarify or expand on any relevant point. Once all of the components of the RPM were covered and the participants had nothing left to say, the interview was terminated. At this point, the participants were given their journal (see next section) and shown how to complete it.

Follow-up interviews. At the end of the first interview, three other subsequent interviews were scheduled with the participants. The purpose of these follow-up interviews was to further examine the participants' experiences of resonance and determine if there were any changes in their experiences following the first interview and the completion of their reflective journal.

Journal. As previously mentioned, after the first interview, each participant was instructed to keep a journal in order to monitor their daily experiences of resonance. In particular, each participant was given the same journal that included: (a) a graph used to identify the level of resonance they experienced during the day along with key situations or events, (b) space to describe their one most resonating and one least resonating situations/events during the day, (c) questions regarding their training and/or competitions, and (d) rating scales to assess their level of resonance within training and competitions, as well as their overall satisfaction with their performance (see Appendix C).

Each journal form was printed on 8.5 X 11 inch paper and was laminated and bound to resist wear and tear during the 10 week journaling period. There was a journal entry page for each day of this 10 week process. The first page consisted of the participants' personal RPM elicited during the first interview. This model was primarily used as a guide for their reflections.

Immediately after the first interview, I explained to the participants the purpose and importance of completing the daily journal. In an attempt to increase the trustworthiness of the data and journaling procedure, I asked the participants to reflect on their previous day and then helped them to complete a journal entry form on site before

they left. All of their questions were answered. They were instructed to make entries prior to going to bed each night. Also, they were able to contact me on a regular basis if they had any questions once they were on their own.

The participants submitted their journal entries to me two days prior to each of the three subsequent follow-up interviews to give me an opportunity to view the entries, compile scores from the rating scales and write brief notes that guided the follow-up interviews. In order to facilitate this process, I picked up the participants' journals at their homes or at another pre-arranged location. The following is a description of how the data from the interviews and the journals were analyzed.

Data Analysis

Both qualitative and quantitative data were collected in this study. The qualitative data resulted from the transcribed interviews while the quantitative data was compiled from the rating scales in the participants' journals. The qualitative data were analyzed after all of the interviews were completed. The quantitative measures were analyzed after each three-week block of the journaling period and upon completion of the entire ten week journaling period. The graphs compiled from the journal scales served to facilitate reflection for the final interview. Following is a more specific description of the data analysis.

Qualitative analysis. Each interview was analyzed deductively, using the RPM (Newburg et al., 2002) as a guideline to categorize the responses. However, an inductive approach was also taken as new themes or sub-categories emerge within the broader categories of data. This design was used for analyzing the data from the first interviews, and the three subsequent follow-up interviews. The analysis steps included: (a)

transcribing the interviews verbatim, (b) cleaning up the interviews (i.e., spelling and grammatical errors), (c) sending them for authentication and making appropriate changes, (d) creating meaning units, (e) importing the data in the software program Nvivo (Richards, 1999), and (f) categorizing the data based on a deductive / inductive approach (Côté, Salmela, Baria, Russell, & Storm 1993).

Quantitative analysis. The journal comprised four rating scales and a resonance chart that each participant filled out on a daily basis. For the purpose of this study, the journals were primarily used as an agent to aid reflection in the qualitative interview process and to increase the trustworthiness of the data. In the future, the scores of these scales will be analyzed using a non-parametric statistical test, more specifically, the Wilcoxon matched-pair signed-ranks test. In this test, the size and the difference between the scores of the participants at each of the three blocks of time during the journaling period will be determined and ranked (Thomas & Nelson, 1996). This will allow the assessment of any changes in (a) overall resonance, (b) level of resonance in training, (c) level of resonance in competitions, (d) satisfaction with training, and (e) satisfaction with competitions during the 10 week journaling period. The journal data will be further investigated and discussed in a subsequent research article.

Steps to Enhance Trustworthiness

Several steps were taken in order to establish an optimal level of trustworthiness for this study, which included internal and external validity, reliability, and objectivity criteria (Huberman & Miles, 1994). Internal validity was established by (a) doing member checking , whereby the first transcribed interviews were authenticated by each participant, (b) using the journal entries to guide questioning in follow-up interviews and

getting the participants to validate the researchers interpretations of the entries, and (c) conducting bi-weekly debriefing sessions with two to three peer researchers.

External validity was increased by providing “thick descriptions” of the results to allow readers to assess the generalizability of the results to their own contexts and to compare the results with findings in the literature (Maxwell, 1992). Reliability was established by ensuring the chosen research paradigm corresponded to clear interview questions and research procedures and that information provided in the interviews corresponded to information given in the daily journal entries (Huberman & Miles, 1994). Finally, clear procedures for gathering, storing, and retaining data were identified to minimize bias. Researcher bias was also minimized by the peer debriefing sessions.

Methodological Contribution

The methodology that was used to investigate the application of Newburg et al.’s (2002) model to the particular context of this study could make a significant contribution to our understanding of resonance at this level of participation in sport. Kimiecik and Stein (1992) advocated the study of flow using a qualitative research design. They promoted the use of interviews because they added depth and detail to how flow was understood and experienced. However, they stated that the length of interviews and the temporal separation between people’s flow experiences and their subsequent description of these experiences were drawbacks of this type of investigation. This problem was less of an issue when exploring the process of resonance because the semi-structured interviews that was used in the current study were not oriented toward specific extraordinary moments in time like flow but, rather, a more general conception of what the participants experienced regularly when they trained or competed. Also, the strength

of this study lies in the fact that a daily journal was completed and four interviews were conducted with each participant in order to allow them to experience and describe their personal process of resonance on a regular basis during an extended period of time, that is, a total of 10 weeks. The journal allowed them to become increasingly aware of their process of resonance and document it on a daily basis rather than retrospectively recall it at the end of the study. The combination of several interviews and numerous entries in logbooks is innovative and contributed to our understanding of resonance in this particular sport context.

PART TWO: RESULTS OF THE STUDY

Running head: PROCESS OF RESONANCE

The process of resonance of four track athletes

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The process of resonance of four track athletes

March 30, 2002

Abstract

The purpose of this study was to identify if and how athletes experience resonance and how they feel it affects their performance and overall well-being. Four middle distance track athletes ($M = 16.5$ years old) in their specializing years of participation (Côté & Hay, 2002) participated in in-depth, semi-structured interviews using the Resonance Performance Model (RPM, Newburg 2001) as a structural framework. Over a period of 10 weeks, each athlete was interviewed once every three weeks and completed a daily journal to follow their personal process of resonance and its affect on training, competition, and well-being. Results showed that athletes experienced resonance in their sport but were often unaware of their dream feeling. Over time, athletes became more aware about how they felt during training, performance, and daily living. Resonance was also positively regarded as affecting well-being and overall quality of track performance. Implications for future research and future application of the RPM are discussed.

The process of resonance of four track athletes

Recent developments in the field of positive psychology are leading researchers to further examine the meaningfulness and positive aspects of experiences in several domains. Sport provides excellent opportunities to examine issues related to positive experiences as it is a domain that influences both physical and psychological health (Biddle, 2000; Rejeski, Brawley, & Shumaker, 1996; Salovey, Rothman, Detweiler, & Steward, 2000). The impact that the regular practice of sport can have on overall health is large. Sport is a strong component of our culture and is a significant leisure activity of many North Americans. Therefore, studying sport, where emotions are often extremely intense, can be helpful in further understanding positive experiences and their impact.

Newburg, Kimiecik, Durand-Bush, and Doell (2002) studied the nature of positive experiences of high level performers in various domains including sport, music, medicine, and the performing arts. They found that positive feelings were central to their development of skills and sustained involvement in their domain. Research in sport has mostly looked at the extreme end of positive experiences such as “flow” (Csikszentmihalyi, 1975; 1990) or “the zone” (Hanin, 1978; 2000). Very little research has focused on concepts relating to meaningful experience as a broader whole. The research of Newburg and colleagues yielded a heuristic model that describes the process involved in experiencing positive desired feelings while performing in a domain and in life in general. This model was termed the Resonance Performance Model (RPM, see Figure 1).

(insert figure 1 here)

Newburg et al. (2002) defined resonance as a seamless fit between how people want to feel and the environment in which they live and is about moving toward a harmonious experience between their inner world, that is, the feelings they want to have, and their surroundings. Newburg's (2001) past investigation into meaningful experience led him to find that outstanding performers follow a typical process as they become experts in their field. This process is represented in the RPM.

The fundamental component entitled the "Dream" is what makes the RPM unique from other related concepts and models. The dream represents the feelings that individuals mindfully seek when they participate in a particular activity. It is uniquely derived from a choice to live and feel a certain way. In the RPM, the dream is not a goal or an outcome, it is a feeling. Preparation is another component of the RPM that involves the activities or situations in which individuals engage that allow them to live their dream feeling. The preparation phase includes mindful skill training that allows individuals to experience their dream regularly. According to Newburg et al. (2002), the process of resonance is often disrupted by various obstacles, reflected in the third component of the RPM, that prevent or disrupt the experience of the dream. An important characteristic of the obstacle component is the troublesome tendency to revert back to the preparation phase when an obstacle is faced. This behavior is called obstacle-preparation looping. Newburg et al. observed that, in the face of obstacles, performers sometimes went back to the preparation phase and attempted to work harder and, in the process, distanced themselves from their dream.

The "Revisiting the Dream" component of the RPM emphasizes the importance of reconnecting with the dream. Newburg et al. (2002) suggested that individuals can

revisit their dream by engaging in other activities such as listening to certain music or spending time with significant others. This allows them to regain perspective and renew their motivation to prepare for their dream within the performance context, and serves to break the troublesome obstacle-preparation loop.

Although the RPM is new and innovative, its components and fundamental tenets can be linked to other important concepts in the literature. The following section highlights how various related concepts pertain to the components of the model.

Enjoyment is an underlying concept of the dream and the experience of resonance. Wankel (1985) reported that “positive affect or feelings are the essential underlying component to all exercise enjoyment experiences” (p. 101). Researchers including Wankel (1985, 1993), Newburg et al. (2002), Weiss & Chaumonton (1992), Durand-Bush (2000), and Schmidt and Stein (1991) have shown that enjoyment is one of the most important reasons why people participate in sport and adhere to it on a long-term basis. Csikszentmihalyi, Rathunde, and Whalen (1993) and Scanlan, Stein, and Ravizza (1989) have stated its importance in the development of expertise. Roadburg (1983) reported that enjoyment is what separates work from leisure. Roadburg ultimately concluded that “play and leisure are both thought to come into existence under conditions of freedom, where behavior is intrinsically motivated. Enjoyment is both the result and reinforcing agent for that experience” (p. 24). Enjoyable and meaningful experiences are fundamental components of the dream because when people are able to feel the way they want to feel, they can truly enjoy the process of being engaged in the moment.

Engagement is another concept that relates to enjoyment and other positive experiences. Newburg et al. (2002) found that an important element of experiencing the

dream is engagement. Engagement provides a form of motivation for and enjoyment of activities (Newburg et al., 2002; Brown, Cairns, & Botterill, 2001). Jung (1983) studied the area of work engagement and found that if people pursue a vocation in which they are highly interested, it “facilitates the full expression of (their) potentialities” (p. 83) or what Jung called “individuation.” According to Jung, engaging in meaningful work contributes to feelings of wholeness and the fulfillment of true potential. Deci and Ryan (2000) found that the feelings resulting from engagement regulate intrinsic motivation contribute to meaningful experience and commitment.

In their research on meaning, Debats, Drost, and Hansen (1995) also contended that there is a “clear pattern within experiences of meaningfulness of active engagement and commitment (to activities)” (p. 371) and that “meaningfulness is essentially connected with a state of being in contact (with the moment)” (p. 371). Maddux (1997) similarly stated, “purpose, meaning, and happiness can only be found by paying attention to each moment and event as it occurs and to each action you perform as you perform it...” (p. 340). Other researchers have further stated that meaningful experience contributes to overall well-being (Waterman, 1993; Zika & Chamberlain, 1992). In fact, Treadgold (1991) found that being engaged in meaningful work prevents stress and depression.

Engagement is a characteristic of not only meaningful experience but peak performance. Garfield and Bennett (1984) and Cohn (1991) characterized peak experiences as an absorption in the task at hand, being in the present moment, a focused awareness of the self that yields feelings of relaxation, confidence, control, and produces

effortless action. Two types of peak experiences pertinent to the concept of resonance include the individual zone of optimal functioning and flow.

Flow has been described as a state of performance in which there is (a) loss of self-consciousness and feelings of control, (b) perceptual transformation of time, and (c) total absorption in the activity (Csikszentmihalyi, 1997). It is also characterized by feelings of personal fulfilment and meaningful engagement in the activity.

Csikszentmihalyi has found that when people are not engaged or do not experience flow, they experience lower satisfaction, greater frustration, and greater stress with their performance. In comparison to flow, the process of resonance can be considered a self-aware way of living whereby individuals choose to engage in activities or situations that allow them to experience ideal feelings and to be in harmony with their environment. It is a mindful process that is, to a great extent, within their control. On the other hand, flow has been described as being difficult to control (Jackson, 1992). Furthermore, the research on flow has generally shown that it occurs more haphazardly and at a subconscious level (Jackson, 1995). Csikszentmihalyi (1997) suggested that flow alone cannot explain why some people commit and excel in certain areas of life. He wrote: "It takes energy to achieve optimal experiences, and all too often we are unable, or unwilling, to put out the initial effort" (p. 33). Engaging in the process of resonance on a regular basis could be one way to create opportunities to experience flow. This could also be the case for Hanin's Individual Zone of Optimal Functioning (IZOF, 2000).

Hanin's (2000) theory of IZOF describes the relationship between individual psychobiological states and performance. Hanin suggested that an optimal performance state "provides the best internal conditions, resulting in a total involvement in the task..."

(p. 67) and focuses on “within-individual dynamics of subjective emotional experiences accompanying successful, average, and poor performances” (p. 66). According to Hanin, individuals perform better under certain levels of arousal. Syrja, Hanin, and Pesonen (1995) found that 88.2% of “poor” soccer performers were outside optimal zones before their matches and also failed to enter their optimal zone during performance. In contrast, 62.5% of successful players were able to maintain their arousal during performance and sustain their zone experience. This form of optimal arousal and engagement seemingly has a positive effect on performance.

The dream can resemble the zone or other optimal performance states like flow, however, it is fundamentally based on a positive desired feeling. Similar to the dream, the zone is very individual, yet it is discussed in the literature as a general state. It does not appear to account for individual differences. The IZOF model has greatly contributed to our understanding of emotional states and performance, however, IZOF’s are primarily focused on outcomes, which are often out of people’s control. This is different than the dream, which is assessed based on feelings that are within the control of individuals.

In terms of the Preparation component of the RPM, several researchers have illustrated preparation strategies that can contribute to living the dream regularly. Research on flow, for example, provides insight into factors that affect the expression of an ideal experience. Jackson (1992, 1995) and Csikszentmihalyi (1997) reported that flow is a state that can be elicited under appropriate conditions. A few examples include being well-trained, maintaining appropriate focus, channeling energy, staying relaxed, and thinking positively. However, these contributors have been generalized in order to encompass all flow experiences. It does not account for individual differences in the

manifestation of flow. There is specific research that presents other possible factors or strategies that could prepare individuals to live their dream.

For example, Brustad (1988) determined that an intrinsic motivational orientation was the strongest predictor of enjoyment in youth and that being challenged facilitated higher levels of enjoyment. A more process orientation also has been associated with higher levels of enjoyment (Lochbaum & Roberts, 1993) and less feelings of boredom (Duda, Fox, Biddle, & Armstrong, 1992; Treasure, 1997). Furthermore, challenging goals that focus on personal development also facilitate greater task persistence (Nicholls, 1984; Rudisill, 1989) and a larger sense of success (Shakarian, 1995).

Feelings of competency also contribute to positive experiences. Harter (1978) noted that feeling competent is linked to being physically prepared. Competence is important for the enjoyment of a sporting experience but, as Ericsson, Krampe, and Tesch-Römer (1993) found, the process of becoming competent is not always enjoyable. Certain types of deliberate and effortful activities are important for skill development but are not always enjoyable and intrinsically motivating. Durand-Bush (2000), Starkes (2000), and Young and Salmela (2000), however, found that some deliberate practice activities were enjoyed by expert athletes. Enjoyment, in this regard, has often been linked to social factors such as coach and teammate involvement (Durand-Bush, 2000; Salmela, 1996; Weiss & Friedrichs, 1986).

Some research can also be related to the obstacle component of the RPM. Jackson (1995) highlighted general factors that not only facilitate but also prevent and disrupt flow. These latter factors include a lack of motivation to perform, non-optimal arousal levels, problems with pre-competitive preparation, non-optimal physical preparation and

readiness, non-optimal environmental and situational conditions, poor performance, inappropriate focus, low confidence or a negative attitude, and negative team play or interaction. This list exemplifies potential obstacles to experiencing the dream.

As previously mentioned, social factors may help the preparation of athletes to experience positive performances but they may also hinder it. Coaches (Salmela, 1996; Scanlan & Lewthwaite, 1986; Weiss & Friedrichs, 1986), parents (Côté, 1999), and peers (Weiss & Barber, 1995) are all in a position to influence the participation of individuals in sport and help make the experience more enjoyable. However, they can also be a source of distraction and frustration.

Another common obstacle athletes face is anxiety. In one study, approach-oriented athletes reported higher levels of task enjoyment than those who displayed a more avoidance orientation, or a fear of failure (Puca & Schmalt, 1999). These authors stated that a fear of failure “disrupts concentration and may give way to the intrusion of self-related or task-irrelevant cognition while performing...” (p. 17). They also reported that this fear is, “... likely to disrupt cognitive resources that are necessary for optimal performance” (p. 17). This obstacle illustrates how disengagement as a result of an obstacle can be detrimental to performance and possibly hinder enjoyment.

The last component of the RPM is revisiting the dream. Refocusing in the face of distractions (Orlick, 2000) is an example of a revisiting strategy. Orlick (1998) also described that a balance between the gold zone, that is, people’s performance domain, and the green zone, that is, other areas in their life are important to overall well-being and performance. According to Orlick, both zones influence each other and impact the experiences of individuals in sport and life: “What we do with our time away from our

work or performance domain directly affects the quality of our work and the level of our performance” (p. xi). Similarly, gaining perspective has been described as an important part of performance. Botterill and Patrick (1996) as well as Brown, Cairns, and Botterill (2001) found that gaining perspective by removing oneself from the performance context and reidentifying the primary reasons for engaging in a performance domain are important strategies to maintaining personal well-being and sustain energy for performance.

Other studies have shown that performers need to balance the amount of effort and energy they spend in their performance domain with adequate recovery periods to prevent overtraining, staleness, and burnout (Ericsson, 1996; Morgan, Raglin, O’Connor, & Ellickson, 1987). Morgan and colleagues (1987) found that as athletes become overtrained, they can experience psychological and physiological disturbances that are detrimental to performance quality.

Finally, the concept of authenticity has a role in the process of resonance. In essence, it can be described as an underlying element that interrelates with the ideas of engagement, freedom, and the expression of the dream. Authenticity deserves inclusion in the overview of the RPM but requires attention independent of the components of the RPM.

Erikson (1959) theorized that we progress through four stages of development as adults: identity, intimacy, generativity, and integrity. In the final two stages, our innate desires for meaning in life are manifest in meshing our work to our inner calling to live authentically or to be our true selves. In other words, we have a drive to freely express ourselves through our activities. Treadgold (1991) revealed that a mid-life crisis possibly

results when a reflection on the meaningfulness of past living is conducted. This often results in life changes that contribute to finding more authentic expressions such as seeking out a “dream” job. Treadgold found that clarity of self-concept or authenticity was positively linked to meaningful engagement and that involvement in meaningful vocations is related to a more stable image of the self. Waterman (1993) posited that situations that are engaging promote intense feelings of being alive and are authentic expressions of one’s self. Furthermore, Brown et al. (2001) reported that authenticity is highly related to feelings of freedom.

Authentic experience is a contributing factor to well-being but it may also lead to higher quality performances. Maslow (1971) wrote that self-actualizers are markedly devoted to tasks and that these tasks or activities are, “...something for which the person is a ‘natural,’ something he is well-suited for, something that is right for him, even something that he was born for” (p. 291). In relation, Hassmen, Koivula, and Hansson (1998) stated that inconsistencies in performance may be partly due to the role of stable psychological traits. In other words, performance may be influenced by an individual’s trait characteristics. Mismatches between the expression of traits and state characteristics can create discomfort (Elliot & Devine, 1994). It could then be argued that, in certain cases, feelings of non-authenticity during performance might contribute to inconsistent performance because they elicit unwanted feelings (e.g., high anxiety) or are disengaging. This could translate into poorer psychomotor control, reduced motivation, or psychological focus toward the performance of the activity.

Overall, very little research has focused on understanding enjoyment and optimal experiences as a process. As a result, there is a lack of concrete or practical approaches to

helping individuals achieve enjoyment in sport and physical activity. The RPM is oriented toward making heightened, ideal experiences more available to people. It is a tool that individuals can use to become self-aware of what they can do to consistently achieve ideal feelings and, more importantly, to be mindful of living in the moment on a daily basis. Only a few studies have been conducted on resonance thus more research is warranted to determine how the RPM applies to different levels of sport participation and contexts and what strategies individuals can use to live their dream on a regular basis. Sport is a domain that has been shown to provide opportunities to experience not only resonance, but also optimal wellness and health. It would thus appear important to further examine resonance in this context.

The purpose of this study was to examine the process of resonance of competitive track athletes and how this process was perceived to affect training and competitions, as well as their subjective well-being. Specific research questions included: (a) What feelings do track athletes seek when they engage in their sport? (b) What enables them to experience these feelings regularly? (c) What inhibits them from experiencing these feelings? (d) What strategies do they use to re-connect with these feelings when they face obstacles? and (e) How do these feelings affect their performance and well-being?

Method

Participants

The participants were four female middle distance track athletes ($M = 16.5$ years of age) from the Ottawa Lions Track and Field Club. Each participant satisfied the selection criteria of being at the specializing stage of sport participation whereby they had chosen to focus only on one or two sport activities (Côté & Hay, 2002). These individuals

were chosen based on their willingness and availability to participate in the study and their current level of involvement in their competitive season.

Interviews

Four semi-structured, open-ended interviews were conducted with each athlete. One interview was conducted every three weeks for a period of 10 weeks. The first interview lasted 90 minutes in length with each subsequent follow-up interview lasting approximately 30 minutes. Interview questions were based on the four components of Newburg et al.'s (2002) RPM, that is, the dream, preparation, obstacles, and revisiting the dream components. Probing questions were also included in the interview guide in order to help the interviewer expand on or clarify certain points if needed. The open-ended questions were posed to the participants in an attempt to examine, in a flexible manner, if and how they experienced resonance and how this affected their performance and well-being.

Upon gaining access to the four track athletes, individual information sessions of approximately 20 minutes were scheduled with them to discuss the project and to sign the consent form. The first interview was scheduled at the end of the information sessions at a date and time that was convenient for both the participant and the researcher. The three subsequent follow-up interviews were scheduled at the end of the first interview. All of the interviews were audio-taped.

Journal

After the first interview, the participants were instructed to keep a journal in order to monitor their daily experiences of resonance. In particular, the participants were given the same journal that included: (a) a graph used to identify the level of resonance they

experienced during the day, (b) space to describe their most and least resonating situations/events during the day, (c) questions regarding their training and/or competitions, and (d) rating scales to assess their level of resonance within training and competitions, as well as their overall satisfaction with their performance. Due to space constraints, data from these journals will be presented in a subsequent article.

Data Analysis

The qualitative data from the transcribed interviews were analyzed after all of the interviews were completed. Each interview was analyzed deductively using the RPM (Newburg et al., 2002) as a guideline to categorize the responses. However, an inductive approach was also taken as new themes or sub-categories emerged within the broader categories of data. In sum, the analysis steps included: a) preparing the data, b) creating meaning units from the data, c) importing the data into the software program Nvivo (Richards, 1999), d) creating categories, and (e) categorizing the meaning unites under appropriate categories (Côté, Salmela, Baria, Russell, & Storm, 1993).

Establishing Trustworthiness

Several steps were taken in order to establish an optimal level of trustworthiness for this study, which included internal and external validity, reliability, and objectivity criteria (Huberman & Miles, 1994). Internal validity was established by (a) doing member checking, whereby the first transcribed interviews were authenticated by each participant, (b) using the journal entries to guide questioning in follow-up interviews and getting the participants to validate the researcher's interpretations of the entries, and (c) conducting bi-weekly debriefing sessions with two to three peer researchers.

External validity was increased by providing “thick descriptions” of the results to allow readers to assess the generalizability of the results to their own contexts and to compare the results with findings in the literature (Maxwell, 1992). Reliability was established by ensuring that the chosen research paradigm corresponded to clear interview questions and research procedures and that information provided in the interviews corresponded to information given in the daily journal entries (Huberman & Miles, 1994). Finally, clear procedures for gathering, storing, and retaining data were identified to minimize bias. Researcher bias was also followed to minimized by the peer debriefing sessions.

Results

Table 1 presents an overview of the categories (i.e., dream, preparation, obstacles, and revisit the dream) and subcategories that were identified, as well as corresponding coded responses in relation to each component of the RPM. Citations from the participants have been included to illustrate the content of these categories.

(insert table 1 here)

Overall, the athletes were able to identify with and apply each component of the RPM throughout the 10-week period. As previously mentioned, the dream is a feeling that athletes seek while they are performing. At the end of the initial interview, the four athletes summarized their dream with a word or phrase that best represented how they wanted to feel on a regular basis. Of interest is that they had difficulty articulating their dream. The following is an example of one athlete’s challenge to identify exactly how she wanted to feel while she performed.

I remember a race when I felt good! I didn't place well but I felt really good. I think it was because I had a good stride. Well, I was still really nervous but I wasn't taking it too seriously. Hmmm... people were cheering and I would still look over and smile at them and nod a bit. I was pretty focused and I was not going to be waving my arms or anything. I'm trying to think about that race because I felt really good. Hmmm...it's hard. (A4)

Substantial reflection occurred throughout the remainder of the 10-week period during which the athletes had an opportunity to learn more about their dream and could elaborate on their original interpretation.

A2 described her dream using a visual image of a sprinter. Of particular interest, she noted that setting process goals was important and allowed her to feel “hungry,” but her dream was also related to the intrinsic notion of improving her abilities in the process.

I like running. If I don't feel a passion for it and I don't feel hungry then I'm just going for a jog.... I feel I can carry myself over the distance and that I'm capable of doing it and I can do it hard. It is not necessarily about trying to catch someone but wanting to improve. Hungry is like being determined. (A2)

A3 illustrated that her dream reflected a strong element of freedom. Her descriptions included characteristics of being in “the zone.” She also identified that “running free” was a highly engaging and enjoyable experience.

I just feel really free. I run free. It's like someone running for fun through the woods, effortlessly.... When I think of running free, it reminds me of running for fun. I like racing and everything but it's just a natural feeling for me to run. I am nervous enough about it to get up for it, but I am really relaxed at the same time.

It is the perfect balance. When I'm running free, I find that's probably when I'm most focused on the race. So really all I'm thinking about is the race itself I'm in a mental zone where I am completely focused. I don't hear anything, my mind is clear and I'm only thinking about how I'm racing, not about the results. (A3)

Alive, competitiveness, energy and fire are words that A1 used to characterize her dream.

When I go out there, I want to feel it. I want to be in the lead and feel really strong and powerful, like nothing can stop me from finishing well. It's like this big push and something just makes me go. It's a whole effort and all the training and people involved build up inside me and I want to go and push. I just want to win. It's like this huge competitiveness inside of me that I reach down to get. I feel alive. I have this energy that won't stop. I feel on fire. (A1)

In comparison to the other participants, A4 reported that her dream involved strength, being in control, and floating. She described a more general feeling of enjoyment and appeared to focus on physical sensations when running.

For me, being in control is mostly physical. I feel like I'm floating a bit. I feel so strong. I feel I can finish the race. If I'm having a good race, I feel like my arms are strong and I can get them up and I can get my legs up. I know I'll be able to finish the race strong. I know this throughout the race...I just look ahead and I go. I feel myself smiling a bit. I'm just enjoying it more. It's not really a thought but a feeling of enjoying what I'm doing. (A4)

Overall, the feelings each athlete sought while they performed were unique but an element of enjoyment was present in their responses. Specific and meaningful words

were chosen to describe their dream. Due to the personalized nature of the dream, preparation strategies also varied among athletes.

Preparation

The preparation component represents the various strategies, situations, or people that helped the athletes experience their dream. Three sub-categories emerged: physical, psychological, and social preparation. Physical types of strategies included those that were oriented toward preparing their body for performing. Many examples arose and included a commitment to appropriate nutrition and rest. Nutrition was the most common preparation strategy and was discussed by all four athletes.

I try not to eat too many sweets. I try to not eat too much. Once you eat too much you feel weighed down and not as ready to go. (A4)

Deliberate practice was also important to living the dream. One athlete described the importance of training as it helped to increase her strength.

I think that getting stronger in the past two months has helped. I have been weight training, and doing more running, and have had more gym time. It just makes me feel stronger, and I feel good about myself. (A4)

Physical preparation was deemed important by each athlete and, according to them, a certain level of physical comfort has to exist in order for them to experience their dream. Without a strong physical state, other strategies like mental preparation seemed to be less effective. It was important for these athletes to take care of their body so that their attention could also be directed toward mental preparation.

Psychological strategies were directed at preparing the mind for the dream to

occur. The athletes reported that visualization, self-talk, goal-setting, relaxation, a positive attitude, race planning, having a balanced life, and time management were strategies that helped them to feel the way they wanted to feel. Each athlete placed importance on psychological preparation but they used different types of strategies that elicited the feelings they sought in their sport. A3 described self-talk as the most significant method of her preparation.

Before a race I kind of have a mantra. I just tell myself, "Have fun, run strong, and run free. (A3)

Visualizing success was key for A1 to feel "on fire." She felt that this served to recreate the feeling, especially when she was feeling unmotivated.

I really try to visualize past races that I've had that I thought were awesome or I visualize running the race and maybe getting a best time. (A1)

Social preparation refers to people who helped the athletes prepare to live their dream. In the following citation, A4 described that having fun with teammates contributed to her running freely.

Practices are fun with my team because it's all about the people there. If you don't have any friends then you're not going to have fun. There's a bunch of us who are friends. We push each other. It's comfortable. (A4)

A1 emphasized how her coach contributed to her feeling of being "on fire." The coach's support during races enhances her feeling. She noted that this support occurs without any planning but she learned that it was a factor in living her dream.

I like it when I'm in the race and I know I'm doing well and my coach is yelling at me. He is not just saying normal stuff, like "Keep your shoulders low!" or "Stay

relaxed!” but I can hear him being excited. I know that I’m doing well, and I know I can do it. Sometimes he’s actually shocked and I think, “Wow!” (A1)

In sum, the athletes were able to identify preparation strategies that helped them to experience their dream after they became aware of their dream and they did so in very specific ways. As a whole, their preparation strategies fit into either physical, psychological, or social categories.

In terms of obstacles, results indicated that they can disrupt the dream or prevent it from occurring altogether. Furthermore, they can be categorized as either internal or external. All of the athletes discussed obstacles that they faced in their sport and in general, internal obstacles seemed to be more prevalent.

Self-doubt and performance anxiety were the most common internal obstacles described. However, more physical types of internal obstacles including injury, pain, and fatigue were also identified. The following citations illustrate these types of obstacles.

It feels really bad when I get all these negative thoughts like I always do. For example, thinking I can’t do it or like I shouldn’t have started. All I have to do is step off the track and my race will be over. Then I won’t have to worry about it. (A1)

When you come back from an injury, it’s really hard. You have to get your rhythm back in your stride. It took me a while. If I feel tight and sore, I’m not going to be able to perform as well. (A4)

The athletes identified many external obstacles like, for example, equipment and people. Overall, external obstacles were depicted as being beyond the athletes’

momentary control. Subsequent revisiting or preparation strategies were, in response, highly focused on the prevention of these obstacles.

Well, it's little things. Maybe your spikes in your shoes are not right or you're not wearing your normal running shoes. Like if you went out of town and forgot certain things. (A1)

Sometimes, I'll say to myself beforehand, "It's just a race, you've run a ton of them, don't worry about it." It would be easy to just do that. I don't want to be around negative people who are saying negative things. If there is a competitor or a teammate who is saying "Woah, I'm nervous," it affects me. (A2)

After an obstacle was encountered, the athletes, in general, were often drawn into the obstacle-preparation loop. The obstacle-preparation loop occurs when individuals go back to preparation immediately after experiencing an obstacle. They omit the revisiting component prior to doing more work, which causes them to distance themselves from their dream. Every athlete in this study discussed instances of getting trapped in the obstacle-preparation loop when they faced obstacles:

I try and look at my training to see if I'm doing something wrong. I also look at the individual races to see what I did and what I didn't do to see if I can find a pattern or something I should be doing. I look for something that might not have been helping me. I'll just keep training hard. (A2)

As the athletes increased their awareness and tried to live their dream more often during training and races, they learned to avoid this loop. They described many revisiting strategies in order to do this.

The revisiting strategies or situations shared by the athletes could be categorized as either performance-related or non-performance-related. In essence, they helped the athletes to get in touch with positive desired feelings and to feel good about themselves again. The following are examples of both non-performance and performance-related strategies, respectfully.

(After a bad race) I think that I don't want to feel this way, like I don't deserve to feel this way, like it's not worth it. I try to do stuff that makes me feel good like calling a friend or just having a normal conversation so that I know I don't have to feel (badly) anymore. Also, I go somewhere by myself, like in my room, and just play the radio, or play my music. Things like that take my mind off of the race and bring me back. (A1)

I think that biking really helps. I know running is what I like to do, but I need other things that make me think "I'd rather be running." So I look forward to my next day of running. (A4)

In addition, revisiting strategies could be categorized according to the timing of their implementation. Strategies were used by the athletes while an obstacle occurred or immediately after (i.e., momentary) or later (i.e., delayed). The following are examples of how one athlete used self-talk and self-reflection to remind herself of positive moments in her sport, which helped her to reconnect with her dream.

I tell myself how much I want it. I don't let something like losing my spikes ruin my race. If I let something like that ruin my race, I feel pretty stupid. I just think it's just a pair of shoes and it's not worth forgetting the hours that I've trained. It's not that important. (A2)

Women distance runners don't peak until they're in their mid to late 20's usually. I just have to run hard. I don't have a whole lot resting on me all the time. I think back on times when I did stick with it and I had a personal best or something good happened. I think about that. That keeps me training hard. I think of upcoming races and I know I have to be back on track. (A2)

Over time, the athletes became more aware of their process of resonance, which included an understanding of revisiting strategies that helped them to reconnect with their dream. Overall, this component required a certain level of consciousness of their dream that was not present in the earlier stages of the study.

Upon the completion of the study, the athletes were asked to describe the influence that living their dream had on their performance. The following are some of their impressions.

I think it helps it, definitely. I think I ran my best races when I wanted it really, really badly. Generally, it has had a positive effect. (A2)

I think it helps it a lot because I think that's when I run the best. I'm just in a zone where I'm not thinking about how fast I'm running. That's when I have my best performances. (A3)

One athlete reported that living her dream, which was being in control, enabled her to sustain her performance over time.

Well, I think that when I feel in control I can go forever. Sometimes I would be riding in the car and I would look outside and (feel) I could run the distance that I'm driving. I could feel it. When you're not in control, you just want to stop. You

don't want to continue with what you're doing. I feel like I want to start walking.

(A4)

Over the course of the study, it was apparent that there was a shift in focus from performance outcomes to feelings experienced in the process. This is not to say that the outcomes were not important, as the following athlete described.

Results are still important. There's a difference between performance and performing. Performance is a result like a time or placing. Performing is the race. It is being in the present, running in the present and being aware of how I feel and whether I wimp out or not. It's how I feel mentally and physically while I'm running and not how I manage to place or what time I get. Sometimes it's windy and wet and no one is getting good times but you can still have an amazing race mentally because you've pushed yourself. I can still perform well without having a good performance. (A3)

I've taken training a lot more seriously. I think of it more as a race and I want to put all my effort into it. I want to feel on fire, and I want to be just as satisfied when I'm done. I just push myself a lot harder than I used to and I want to see what I can do. My workouts are a lot better. I try to think about the characteristics of feeling on fire. I just think "I want to be on fire" and I go so much harder and keep pushing yourself. I just train a lot better. (A1)

Two of the athletes also reported that their dream was different in competitions compared to practice sessions. One described this difference in relation to the intensity of the feeling.

Running free doesn't come as obviously in training (as it does in races) but it happens in almost every workout, just not as strong. (A1)

Another athlete described her heightened level of self-awareness as a result of participating in this study and how this has impacted her training sessions.

I think feeling in control helps because half way through a workout I can tell how it's going to go. I think about it more and I try to fix or change a bit. I'll change my program so I'll be able to resonate more or just have a better workout. I just think about (being in control) along the way instead of at the end, when it's too late. (For example), if I go for a 10 k run and after 5 k I would really not feel in control, I would normally just push myself to finish it. Now, when I think about being in control, I would either slow down for a bit and then do some strides, stretch and then continue, or probably just stop and do some different exercises. Then I would just jog it back, finish the work out, and enjoy doing strides instead of just finishing the extra 5 kilometers. (A4)

Overall, the athletes described that living their dream had a positive effect on their motivation to train and their enjoyment, motivation to train, and overall well-being. They reported that resonating in training and in competitions had a broader influence on their life in general. Living their dream in athletic contexts helped them to reflect on the nature of their dream in other situations as well. Well-being is reflected in the following citations that address dealing with stress, self-confidence, emotional awareness and management. Stress reduction for one athlete was related to a newly acquired perspective on obstacles in her daily life. In the final interview, she further reflected on how revisiting her dream was important to her.

It affects my well-being a lot. I think that I am at least a little bit more relaxed now and I try not to let the little things bother me as much. They are no big deal. I will get over them. (A1)

Feeling “hungry” not only affected A2’s performance but also her self-confidence to meet other challenges in her life.

I think it isn’t always the easiest thing to get hungry for a race if you’re not feeling good or if your training isn’t going well. If I can manage to get hungry during the race and I don’t give it up, I definitely think it is worth it. Once I do that, I say to myself that I did this so then I feel that I can do other things. I can do anything. (A2)

As previously mentioned, the process of resonance requires a certain level of self-awareness. For A4, this affected her decision making.

I think I have been more conscious about my decisions than before. I would pull myself out of situation that I knew beforehand I wouldn’t really want to be in. It’s the little things like, for example, someone will call me up and want to meet me somewhere and I really wouldn’t be in the mood. I would (normally) just go and drag myself along, but, I guess since I’ve been conscious about the fact that I want to be resonating most of the time and feel good, I would say, “I’m not going to do that. I’m just going to stay home and rest for a bit” and then I’d go out later. It’s little things like that. (A4)

Finally, the concepts learned during this 10-week period have strengthened A3’s emotional management skills and have had a significant impact on her life.

I have reached a breakthrough in the past month. It helped me to realize a lot of things about running but also in everyday life...It helped me to realize that I can control the way I feel when I am having a low. I learned a lot about my highs and lows and how running free can affect my mood and how I feel. It has a bigger impact on my life than it does on running. (A3)

In sum, each athlete reported that their dream positively influenced not only in their performance but also their life in general. They took the principles of the RPM and applied them in various situations, which contributed to their overall well-being. Many other notable points regarding the impact of resonance were discussed by the athletes. The following citations illustrate this.

Let's say I'm out with friends in any kind of situation and having fun and resonating, I don't realize it at the time but I'm not worrying about anything and I'm in the present. I'm not thinking about the homework I need for tomorrow or anything like that. I'm focused on what I'm doing at the moment and having fun. It helps me clear my mind. (A3)

I never knew there was an actual resonance, I never knew it was an actual term. I never really realized that every one had a point in their race were they feel a dream feeling. I always thought of it as just falling asleep. I always wanted to not be able to think in my races. I just wanted to fall asleep so I could get into the groove but it's actually like a whole feeling in you and you make it what you want it to be. Now I call it "on fire." I just want to go out there, feel like fire and want to run really hard and just rip up the track. I feel free when I'm running. (A1)

Discussion

The purpose of this study was to identify the process of resonance of four track athletes and its effect on their well-being and performance. After exploring the components of the RPM for 10 weeks, several points of interest emerged.

First, it was challenging for the athletes to identify their dream due to their lack of self-awareness. The athletes deliberated and put a great deal of effort into describing the feelings they sought when they performed or trained. It was difficult for them to articulate these feelings because it was something they had not seriously thought about beforehand. In other words, the dream feeling existed but was rarely given attention. In fact, the use of imagery (i.e., “describe an image that represents how you want to feel” or “how would you describe this feeling to an 8 year old?”) became a useful interview aid in prompting these feelings. In this regard, asking questions pertaining to the dream in various ways was important to facilitate self-reflection and in eliciting clearer responses. It was important to invest a considerable length of time in the process because the rest of the interview questions related to the other components of the RPM were contingent on the clarity of their descriptions.

Each participant described their dream using personally meaningful words or phrases that contributed to a rather tailored description of their ideal feelings. However, the analysis did reveal some similarities among their descriptions. First of all, their dream was often associated with the concept of freedom. The participants expressed that when they were living their dream in training and competitions, it was a free experience. Their feelings of freedom appeared to be linked to being in the moment and absorbed in the

activity. As Newburg et al. (2002) postulated, freedom is an inherent component of the expression of the dream and occurs in the process of being engaged in an activity.

In their descriptions of their dream, some of the athletes alluded to characteristics of the zone (Hanin, 1978) or flow (Csikszentmihalyi, 1975). Athlete A4's description of "in control" did not include any zone characteristics but A3's "running free" did. A3 said,

I am nervous enough about it to get up for it, but I am really relaxed at the same time. It is the perfect balance.

Not surprisingly, there was variation in the specific characteristics of the dream because people differ in their perceptions, interpretations, and experiences with feelings.

In addition, in reference to work by Deci and Ryan (2000), the notion of being challenged also surfaced in the interviews. Competition served as a challenge for the athletes and this challenge was interwoven into their dream experience. Moreover, the pursuit of goals increased their level of resonance because their goals were meaningful, motivating, and allowed them to feel the way they wanted to feel when they attempted to achieve them. The athletes also enjoyed the process of pursuing goals partly because they sensed achievement or experienced self-growth in doing so. This is in line with the basic tenets of intrinsic motivation (Deci & Ryan, 2000). This confirms Newburg et al.'s (2002) findings that inspiring goals that are in line with the dream are an important part of the process.

Although meaningful engagement was intrinsically motivating, outcomes, such as race times, also played a role in achieving resonance. According to the athletes, they would find it quite difficult to resonate if there was no finish line or any competitors in their races as this aspect of performing challenged them. As Newburg et al. (2002) found

with expert performers, outcomes are still a part of the process because they often represent the end of a succession of process goals. Thus, goals can be set to both live the dream and achieve an end result. The athletes in this study who set goals found that the goals they set related to both their dream and outcomes, which in turn, helped them to live their dream with maximal intensity.

The athletes in this study also enjoyed their preparation and provided examples of using this time to consciously consider their dream feeling and its influencing factors. For example, A4 became more conscious of her dream feeling of being “in control,” which influenced her decisions to do certain deliberate exercises during her training. On one occasion, she interrupted her training session to change her training activity because she was not enjoying it. In this instance, her physical preparation became more enjoyable. This example contrasts Ericsson et al.’s (1993) notion that deliberate practice is not inherently enjoyable. It appears that a mindful awareness of ideal feelings and related preparation strategies can help make effortful training more enjoyable.

As the athletes became increasingly more aware of their dream, they developed more strategies that helped them to resonate more in their training. This finding suggests that focusing on positive feelings, even during effortful and demanding bouts of training can help athletes to remain not only motivated but also engaged and fulfilled. This has implications for coaches and sport psychologists who play a role in crafting the environment for athletes to experience high quality performances. It would appear to be significant to encourage athletes to identify how they want to feel and to provide opportunities for them to focus on and experience these feelings.

The preparation strategies the athletes used were many and diverse. However, they were either psychological, physical, or social in nature. These athletes tended to favor the one particular type of preparation. This may be due to their comfort level with using one specific strategy as a result of past success with it. For example, one athlete emphasized the use of self-talk to prepare to connect with her dream. However, according to all of the athletes, physical preparation was crucial to live their dream, which is logical since physical readiness and fitness are indispensable in most types of sport.

The emphasis each athlete placed on one particular preparation category possibly reflects the uniqueness of their dream. What helped one athlete live their dream was possibly entirely different than what helped another. Thus, there is danger in generalizing specific preparation strategies to all individuals and contexts. Nevertheless, the identification of common preparation strategies can help to understand what types of general strategies exist in sport.

It is also noteworthy that the athletes learned new preparation strategies over the 10-week study. They had never explicitly identified their dream prior to this study. As Maddux (1997) illustrated, this mindless participation can prevent individuals from fully enjoying their experiences. However, the interviews every three weeks in concert with maintaining a daily journal facilitated their self-awareness of not only their dream but also what facilitated its manifestation. Thus, they were able to make note of what contributes to more intense dream experiences and tried to mindfully set up their environment appropriately to include more of these situations, events, or strategies.

Coaches and teammates also played a role in helping the athletes live their dream. This supports findings that a social environment conducive to the development of skills

and enjoyment of the activity is important (Durand-Bush, 2000; Salmela, 1996). Overall, the athletes were able to incorporate various strategies into their training or races to “test” them out. This further emphasizes how resonance is a mindful process and also how practitioners can help athletes become more self-aware to develop strategies to experience their dream more often (Newburg et al., 2002).

In addition, each athlete easily identified obstacles. Emphasis was placed on the challenges that internal obstacles, such as self-doubt, posed on experiencing their dream. The athletes also reported facing external obstacles, like negative teammates. As the 10 weeks progressed, obstacles were easier to identify and the athletes were more capable of dealing with them due to their increased awareness and ability to reconnect with their dream and to prepare to make it happen. It was evident that their increased self-awareness contributed to the choices they made to deal with obstacles. For example, A2 chose to avoid negative teammates who served to disrupt her process of resonance. Thus, her awareness of the RPM helped her develop skills to gain more control over her ideal experiences.

It is noteworthy that two of the athletes were more cognizant of their process of resonance after the first interview whereas the others became more conscious of it toward the end of the study. This finding is important since it demonstrates that athletes can learn to resonate higher in specific situations and as a greater whole over time by paying attention to themselves and their environment. In essence, this required a certain level of deliberate practice with the RPM with a particular focus on feelings in the process of performing. This supports Newburg et al.’s (2002) contention that the RPM is an

effective tool for helping individuals, in this case, competitive track athletes, to feel good about themselves and to improve the quality of their performance.

Like Newburg et al. (2002) found with expert performers, the athletes in this study temporarily disengaged from their dream when they faced obstacles. This disengagement, in turn, contributed to a decrease in their enjoyment of training or racing. The athletes reported that prior to this study, they habitually responded to obstacles by reverting back to training (i.e., obstacle-preparation loop) instead of considering how they wanted to feel. Maddux (1997) discussed how habitual behavior is mindless and disengaging and that this disengagement prevents individuals from exacting enjoyment from the activities in which they participate. It was imperative for these athletes to be aware and mindful of their dream when they faced obstacles to avoid this loop.

Identifying and implementing strategies to revisit the dream required the highest level of self-awareness because it demanded that the athletes recognize when they were not resonating. Interestingly, they shared that they had physical, emotional, or psychological triggers that indicated that their ideal level of engagement was disrupted. For example, after encountering an obstacle, A4 would physically feel uncomfortable, which indicated that she was distanced from her dream of being “in control” and that she needed to reconnect with it. These triggers seemed to emerge from the athletes’ overall awareness and incited them to take action to regain lost feelings. By being aware of the importance of revisiting their dream after hitting an obstacle, they avoided slipping into the obstacle-preparation loop, a situation that each athlete encountered in their sport. A further investigation of these possible triggers may be useful for applied uses of the RPM.

The interviews on their own served as a revisiting experience for the athletes. Each interview challenged the athletes to think about their dream feeling and make evaluations of their personal process of resonance. The earlier interviews were even more beneficial because their awareness of their dream feeling was fairly low. In actual consulting settings, practitioners play an important role in conducting similar types of interviews to facilitate self-reflection and perspective regarding resonance and the components of the RPM.

The athletes revisited while they were connected in some way to their performance context (i.e., either physically being at the track or thinking about track) or when they were distanced from this context. Participating in non-performance related activities, like being with friends, helped the athletes to gain perspective on why they run and re-experience positive feelings that they, in turn, transferred to their sporting context.

The athletes also demonstrated that revisiting can occur in the moment an obstacle is encountered or at a later time. The athletes' selection of revisiting behaviors can be explained in various ways. First, it could be that their obstacles were so prominent that they had to be attended to immediately. Second, their revisiting strategies could have been a result of their style of personality where a preference was given toward revisiting in a particular manner. Third, a chosen strategy could have been contingent upon whether or not the revisiting process would threaten performance quality. In other words, revisiting may require mental or physical resources that are needed to perform optimally and thus might have to be delayed in order to avoid compromising performance. For example, it might not be appropriate to deal with a disruptive opponent at the start line by going for a walk. Using positive self-talk or another momentary strategy may be more

effective in staying engaged in the task at hand. In sum, the revisiting strategy chosen to overcome an obstacle must fit the context. Therefore, the athletes must know when it is appropriate to revisit, that is, immediately or at a later time. Overall, these two dimensions of revisiting the dream (i.e., momentary vs. delayed and performance-related vs. non-performance-related) are new to the research on resonance.

Another objective of this study was to gather the athletes' perceptions of the role of resonance in training and competition. There seemed to be a period of time in the initial stages of the study where the athletes learned more about their dream as they trained and raced. This was a period of introspection and progressive self-awareness that presented learning experiences that helped them to understand their personal resonance process. Thus, the impact of resonance on training and competition was unclear for the most part until the second half of the study. Once the athletes fully understood their personal process of resonance and made a conscious effort to apply the components of the RPM, they witnessed a positive impact in their training and races.

The role of resonance seemed to get clearer as the study evolved. The athletes all noted that it significantly contributed to the quality of their performance. They equated living their dream with a successful training session or race. Resonance became a defining characteristic of their good workouts and races. As a result, outcome goals were not entirely minimized but they were placed in perspective. Each athlete began to focus more on the process than on outcome. This, again, emphasizes the importance of strategic goal setting in the process of resonance (Newburg et al., 2002).

Furthermore, results showed that the dream facilitated motivation to perform. This motivation was important for one athlete because she ran harder on the track. Another

athlete said it increased her stamina. This is consistent with the research of Deci and Ryan (2000) who noted that activities that elicit positive feelings are intrinsically motivating and contribute to self-determination. Thus, resonance can enhance both the psychological and physical aspects of performance that are certainly necessary for an optimal sport experience.

Finally, two athletes described how their dream was somewhat different in training compared to competitions. The role of goals could provide some explanation in these cases. A3 explained that the outcome was important to her “running free.” For her, competitions involved more meaningful outcome goals compared to training so her dream may have been heightened based on this. In this case, it seems that her dream, which was an intrinsically motivating experience, could not be entirely separated from the outcome. The outcome was still a part of the process of performance and, thus, contributed to her dream feeling in a meaningful way. Nonetheless, differences found between the dream in training and competition suggest that the dream may be more situation or context specific.

The athletes’ well-being was also positively influenced by the process of resonance. One athlete described how it influenced the decisions she made in her day. She assumed more responsibility for how she wanted to feel by predicting how she would feel in situations beyond track. She felt empowered that she had more control over how she felt than she initially thought. For another athlete, it provided a greater sense of self-esteem, while it helped another to reduce her stress. These instances provide support that the concept of resonance is not a brief experience but an ongoing lifestyle that affects all areas of one’s life.

This research has instigated several additional questions and concerns about the concept of resonance. Newburg et al.'s (2002) research on resonance was with expert performers in their respective domains. It could be argued that experts have attained a certain level of maturity that includes a clearer awareness or understanding of their dream. In the current study, the participants had a great deal of difficulty describing their dream because they had not previously thought about how they wanted to feel in their sport. It took some time and a certain depth in awareness before they were able to do so. Is this the case for other athletes participating at similar or different levels? It would be interesting to make further comparisons between athletes at each level of participation, that is, sampling, specializing, investment, maintenance and recreational levels (Côté & Hay, 2002).

In addition, it may be worthwhile to conduct a longitudinal study whereby the long-term effects of resonance can be more closely evaluated. In other words, how does the RPM affect behavior over a longer period of time? In this regard, incorporating more measurement instruments, including questionnaires on quality of life, for example, could provide added insight into the impact of resonance on performance and well-being. This study will serve as a foundation for research in this area and will facilitate the conceptualizing of more research questions and the use of innovative methodology in qualitative inquiry.

Finally, a reevaluation of the definition of terms is warranted if conceptual clarity is desired. Newburg et al. (2002) defined resonance as being about “moving towards a harmonious experience between one’s inner world, that is, the feelings an individual wants to have, and his or her surroundings” (p.8). This definition, however, may be too

compared to other concepts in the area of positive experience. Upon considering the related literature and the results of the current study, the concept of resonance could be more aptly described as a process of evaluation that uses an intensity continuum to identify the discrepancy between current feelings and ideal feelings (the dream). Furthermore, the definition of the dream could be slightly adjusted to represent a feeling consciously identified as the ideal feeling sought in a particular context. In light of these suggestions, the RPM as a whole could be described as a tool that facilitates movement toward experiencing the dream at its highest intensity by developing and maintaining self-awareness of the distance between current feelings and ideal feelings.

This study examined the process of resonance within one specific context. Sport was chosen because it is often a forum for experiencing many feelings and emotions in differing grades of intensity. In all, the athletes were able to identify their dream over time by increasing their awareness of what facilitates and inhibits its manifestation in training, competitions, and their daily life. All of the four athletes applied the RPM in unique ways and reported that it had a positive effect on both their performance and overall well-being.

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FIGURE 1 – RESONANCE PERFORMANCE MODEL

(RPM, Newburg et al., 2002)

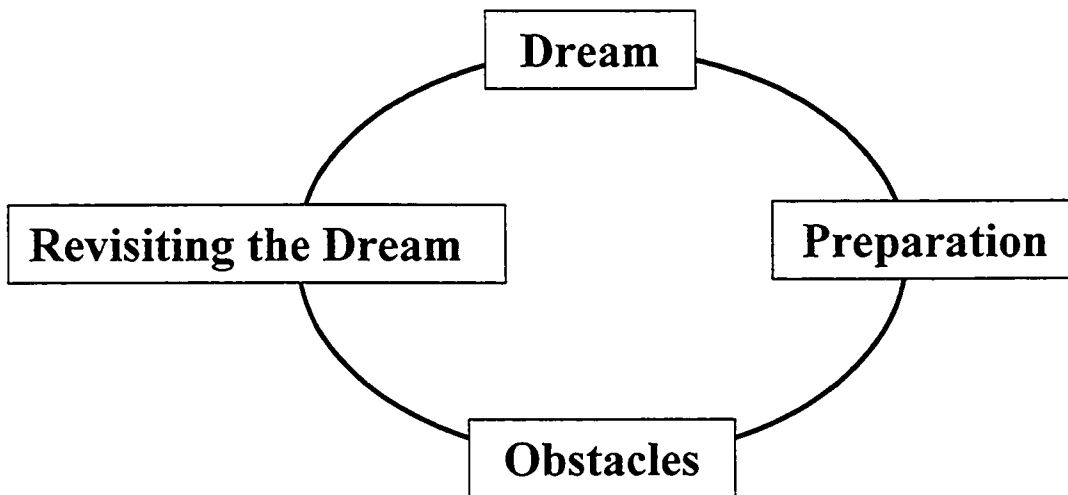


TABLE 1 – DATA TABLE

Table 1

List of Sub-categorical Responses by Component of the Resonance Performance Model

RPM Components	Sub-categories	Responses
Dream		On fire, Hungry, Running free, In control
Preparation		
	Psychological	Self-talk, imagery, time management, relaxation, pre-competition routine, goal setting, balance
	Physical	Nutrition, rest, stretching, practising, equipment
	Social	Coaches, teammates, friends, parents, competitors
Obstacles		
	Internal	Injuries, anxiety/ pressure, fatigue, self-doubt, stress
	External	Poor outcome, broken routine, opponent, coach, teammates, equipment, weather, accommodation
Revisiting the Dream		
	Performance-related	Race simulation, using a weaker training partner, contrasting with other sports
	Non-performance-related	Relaxing with others, alone time
	Momentary	Ignoring event, positive self-talk
	Delayed	Questioning purpose of racing, taking a break, reflecting on resonating experiences

Note. Responses listed in order of highest frequency of occurrence.

PART THREE: CONTRIBUTION OF COLLABORATORS

STATEMENT OF CONTRIBUTORS AND COLLABORATORS

The preceding article was developed and written solely by the author, Kelly Doell. Guidance for both research methodology and writing style were provided by the thesis supervisor, Natalie Durand-Bush.

PART FOUR: REFERENCES AND APPENDIXES

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APPENDIX A – ETHICS DOCUMENT



Université d'Ottawa • University of Ottawa

Cabinet du vice-recteur
à la recherche

Office of the Vice-Rector,
Research

HEALTH SCIENCES AND SCIENCE RESEARCH ETHICS BOARD

CERTIFICATION OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Health Sciences and Science Research Ethics Board has examined the Application for Ethical Approval for the research project *Experiencing enjoyment and resonance in sport to achieve optimal performance and wellness (File H11-00-09)* submitted by Natalie Durand-Bush and Pierre Trudel. The REB found that this project meets appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards and accordingly gave it a Category Ia (Approval). This certification is valid for one year from the date indicated below.

Lise Frigault

Protocol officer for ethics in research,
for the Chair of the Health Sciences and Science REB
Julian Roberts

January 31st, 2001

Date

FILE NUMBER: H11-00-09

APPENDIX B – CONSENT FORM

Name of researcher: Kelly Doell, M.A. Candidate
University of Ottawa
Faculty of Health Sciences
School of Human Kinetics
Telephone number: 562-5800 (ext. 4276)
E-mail address: kdoellperformance@hotmail.com

I, _____, am interested in collaborating in the research conducted by Kelly Doell of the School of Human Kinetics of the Health Sciences Faculty at the University of Ottawa. The purpose of the research is to examine if and how athletes experience resonance and enjoyment in their sport on a daily basis. In this research, 'resonance' means being engaged in an activity, thoroughly enjoying oneself, feeling alive, connected, and fulfilled, or experiencing harmony between one's inner self and external environment.

My participation will essentially consist of:

(a) Attending four interviews:

1. First interview (1-2 hours)
2. Follow-up interview I (30 minutes)
3. Follow-up interview II (30 minutes)
4. Follow-up interview III (30 minutes)

The interview sessions will be audio taped and scheduled at my convenience and that of the researcher. They will occur every three weeks after the first interview.

(b) Completing a journal on a daily basis for a period of 10 weeks. I will submit my journal entries at least one day prior to each follow-up interview. The researcher will pick them up at my training facility or another pre-arranged location.

I have received assurance from the researcher that the information I will share will remain strictly confidential. Anonymity will be assured in the following manner; a number will identify me so my name will not appear on any transcript. I also expect that only the research team will have access to the codes and data. I have been informed that the audio tapes and transcripts of the interviews will be stored in Kelly Doell's office.

I understand that this activity deals primarily with personal information about my athletic experience and that the research does not have any risks. The goal of the researcher is not to evaluate my abilities but to gain information on how sport participants experience resonance. I also understand that the mid- and long-term goals of the researcher is to use the information from many sport participants to develop and validate an educational

program that mental training consultants could use while working with athletes. I am also aware that the results of the study will be presented at conferences and/or published in sport journals.

I am free to withdraw from the project at any time, before or during the interviews and journaling period. I can also refuse to participate and refuse to answer questions without prejudice.

Any information requests or complaints about the ethical conduct of the project may be addressed to the relevant Research Ethics Board of the Social Sciences and Humanities of the University of Ottawa, or by calling the Protocol Officer for Ethics in Research at (613) 562-5800 (ext. 1787), Tabaret Hall, room 302. There are two copies of the consent form, one of which I may keep.

Researcher's signature: _____ Date: _____

Research subject's signature: _____ Date: _____

I wish to receive a summary of the findings of this research, which will be available around April, 2002.

Yes ____ No ____

Address: _____

APPENDIX C - INTERVIEW GUIDE BASED ON RPM (Newburg et al., 2002)

A) First interview questions

General opening questions

- Tell me about yourself and your sport.
- Why do you engage in your sport?

Main questions and probes

Dream

- How do you want to feel on a daily basis?
- How do you like to feel when you engage in your sport? Describe this feeling to the best of your ability.
- Is this feeling the same in training and competition? Explain why and how it is different.
- Can you summarize this feeling in a few words or sentences?

Preparation

- What allows you to feel this way (i.e., personal thoughts/behaviors, environmental factors, people, strategies, goals, etc.)
- Tell me more about those situations in your sport where you experience this feeling.
- Does this feeling affect your performance in (a) training and (b) competitions? Explain why and how.
- Does this feeling affect your overall well-being? Explain why and how.
- How often do you experience this feeling?
- How often would you like to experience this feeling?
- What do you need to do to experience this feeling more often?

Obstacles

- What prevents you from experiencing this feeling on a daily basis?
- Tell me about some of the barriers or obstacles that you have faced in the past.
- How do these obstacles affect (a) your preparation, (b) performance, (c) well-being.

Revisiting the dream

- What do you do when you face an obstacle or barrier?
- Do you do anything to re-connect with the feeling you seek in your sport? Explain what and why.
- Did an obstacle ever get so big that you dropped out of your sport or at least considered it? Describe why and what you did or did not do.

Summary

- What is your feeling now that we are approaching the end of the interview? Have you learned anything so far?

- How does the knowledge of the Resonance Performance Model affect you overall well-being and perception of performance?

B) Follow-up interview questions

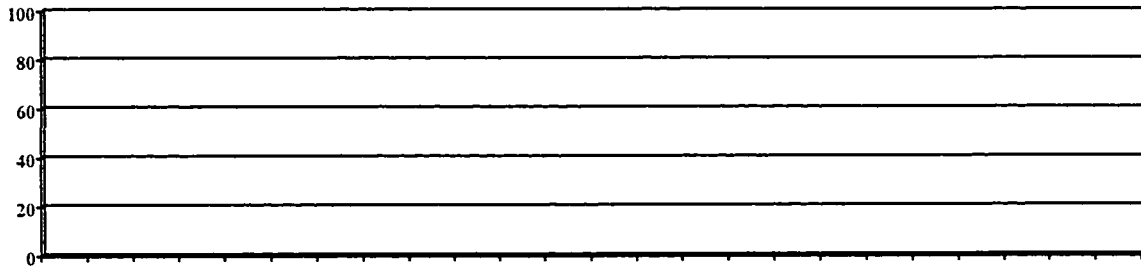
- What have you learned in the last three weeks?
- Describe your most resonating experience and tell me why it was a high.
- Describe your least resonating experience and tell me why it was a low.

C) Final interview questions (in 3rd follow up interview)

- What have you learned about resonance in your (a) life in general, (b) training, and (c) competitions?
- Tell me about your journalizing process.
- What are your overall impressions of the least 10 weeks. What were the biggest lessons?

APPENDIX D – RESONANCE JOURNAL FORM

Resonance Chart



Time 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4

<u>High 1 -</u> %	<u>Low 1-</u> %
<p>What was the event/situation?</p> <p>Why was this a high?</p> <p>Did you do anything to make this a high?</p> <p>What can you learn from this?</p>	<p>What was the event/situation?</p> <p>Why was this a low?</p> <p>Did you do anything to make this a low?</p> <p>Did you do anything to get out of the low?</p> <p>What can you learn from this?</p>

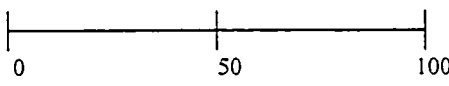
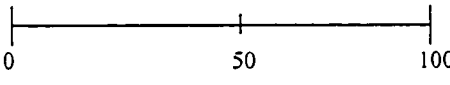
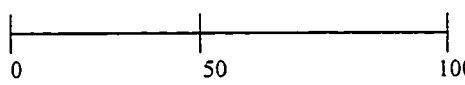
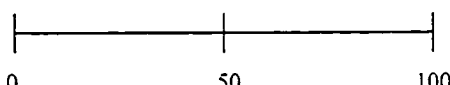
Training	<u>Competition</u>
<p>What did you do?</p> <p>Overall, how much did you resonate?</p>  <p>Why?</p>	<p>Describe the competition (when, where, why, etc.).</p> <p>Overall, how much did you resonate?</p>  <p>Why?</p>
<p>How satisfied were you with your training?</p>  <p>Why?</p>	<p>How satisfied were you with this competition?</p>  <p>Why?</p>
<p>How can you resonate more next time?</p>	<p>How can you resonate more next time?</p> <p>Results:</p>

FIGURE 1 – RESONANCE PERFORMANCE MODEL

(RPM, Newburg et al., 2002)

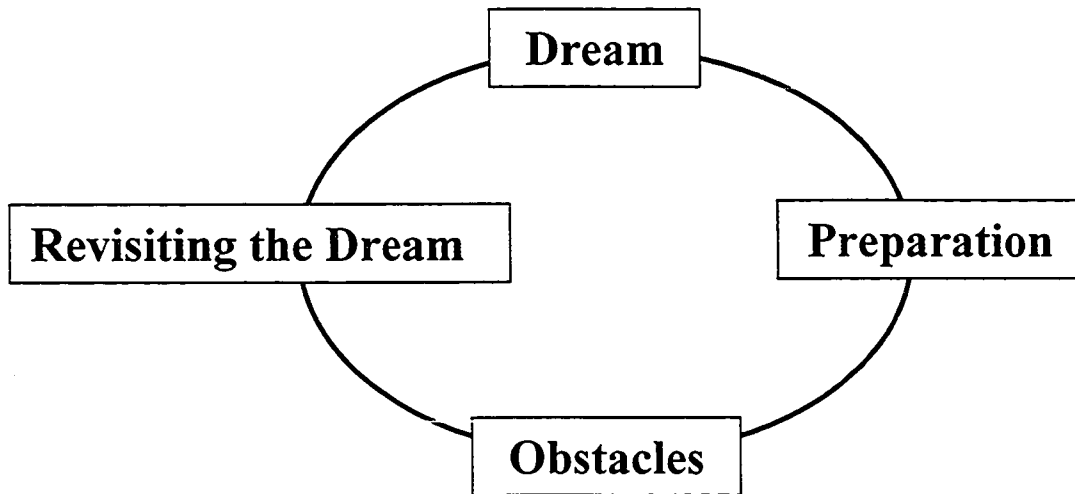


TABLE 1 – DATA TABLE

Table 1

List of Sub-categorical Responses by Component of the Resonance Performance Model

RPM Components	Sub-categories	Responses
Dream		On fire, Hungry, Running free, In control
Preparation		
	Psychological	Self-talk, imagery, time management, relaxation, pre-competition routine, goal setting, balance
	Physical	Nutrition, rest, stretching, practising, equipment
	Social	Coaches, teammates, friends, parents, competitors
Obstacles		
	Internal	Injuries, anxiety/ pressure, fatigue, self-doubt, stress
	External	Poor outcome, broken routine, opponent, coach, teammates, equipment, weather, accommodation
Revisiting the Dream		
	Performance-related	Race simulation, using a weaker training partner, contrasting with other sports
	Non-performance-related	Relaxing with others, alone time
	Momentary	Ignoring event, positive self-talk
	Delayed	Questioning purpose of racing, taking a break, reflecting on resonating experiences

Note. Responses listed in order of highest frequency of occurrence.