



# THE FIRE THAT BURNS FROM WITHIN: TALES OF LEGENDARY SWEDISH TABLE TENNIS PLAYERS

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#### Author's note

The accomplishments of this master thesis would not have been possible without the help and engagement of others. I would like to thank my participants Jan-Ove Waldner and Jörgen Persson for taking part in this study. It has been truly inspiring which provided a great learning experience. Moreover, thanks to Ulf "Tickan" Carlsson and Mikael "Äpplet" Appelgren for supporting my research idea: to investigate and spread the knowledge of our legends in order to promote development and well-being of future generations. Moreover, thanks to Fredrik "Figge" Håkansson for great discussions during our travels to Norway.

I would like to thank Professor Natalia Stambulova for encouragement and help to extend my critical thinking. It has been truly inspiring to have you as a supervisor. I would like to thank Professor Reinhard Stelter at the University of Copenhagen for profitable discussions.

Great thanks to my love Ulrika for all the support and for making an effort providing me with time and energy to overcome barriers when the going got tough. And, to my little princess, Josefine, who brings tremendous pride and joy.

Halmstad, 23<sup>rd</sup> of July 2011 Istvan Moldovan Moldovan, I. (2011). *The fire that burns from within: Tales of legendary Swedish table tennis players.* (D-essay in Sport Psychology 91-120 ECTS credits). School of Health and Social Sciences, Halmstad University, Sweden

## Abstract

The purpose of this study was to investigate the dynamics of motivational forces in career stages in legendary table tennis players. Participants invited for this study were two highly recognized Swedish table tennis players who achieved major titles during their competitive career. The theoretical frameworks included the self-determination theory (SDT; Ryan & Deci, 1985, 2000), achievement goal theory (AGT; Nicholls, 1989), and the developmental model of transition faced by athletes (Wylleman & Lavallee, 2004). The study was based on in-depth narrative interviews on the field where the researcher stimulated participants to tell their stories in retrospect based on their perceptions of motivational drives across different stages. Results revealed that participants were (a) strongly driven by multiple personal goals (e.g., self-determined, winning major titles), (b) had high perception of ability (e.g., high task and high ego), (c) table tennis was central to their lives, and (d) they were surrounded by facilitative environment. Results are discussed in relation to theoretical frameworks and previous research.

Keywords: achievement motivation, career transition, elite athletes, self-determination, table tennis

Moldovan, I. (2011). *Elden som brinner från insidan: berättelser av svenska legendariska bordtennisspelare*. (D-uppsats i Psykologi inriktning idrott, 91-120 HP). Sektionen för Hälsa och Samhälle. Högskolan i Halmstad.

# Sammanfattning

Syftet med föreliggande studien var att undersöka dynamiken i motivationsprosessen genom olika karriärövergångar hos legendariska bordtennisspelare. Två välkända svenska bordtennisspelare deltog i studien som har vunnit stora titlar under sina professionella karriärer. De teoretiska ramverk som användes var self-determination theory (SDT; Ryan & Deci, 1985, 2000), achievement goal theory (AGT; Nicholls, 1989) och developmental model of transition faced by athletes (Wylleman & Lavallee, 2004). Studien var baserad på två djupnarrativa intervjuer där deltagarna stimulerades att i retrospekt berätta hur de upplevde dynamiken i deras motivation i olika karriärövergångar. Resultaten visade att deltagarna var (a) stärkt drivna av multipla personliga mål (själv-bestämd, vinna stora titlar), (b) hade hög upplevd förmåga (hög uppgift och hög prestationsmål), (c) bordtennis var central i deras liv, och (d) de var omringade av stödjande miljöer. De erhållna resultat diskuteras i relation till teoretiska ramverk och tidigare forskning.

Nyckelord: bordtennis, elitidrott, karriärövergångar, prestationsmotivation, self-determination

What are the psychological explanations behind the forces that motivate elite athletes to accomplish excellence in the fields of sport, especially over a long period of time? Motivation is thought to be one of the most important aspects of human behavior and has been extensively studied in education and other domains. Understanding and enhancing motivation is a popular field of research in psychology, as well as in sport and exercise psychology (Roberts, Treasure, & Conroy, 2007). It is believed by many that motivation is the foundation of sport performance and without it even the most talented athlete will unlikely fully realize his or her potential (Duda & Treasure, 2010).

In order to understand the motivational process in elite sports it is essential to know how athletes perceive themselves and what criteria they use to define their competence in achievement contexts. Furthermore, it is of great value for sport psychology practitioners to understand the reasons behind sport engagement, i.e. the *what* and *why* of the motivational process. Although a large amount of studies have been grounded in Bandura's (1977) social cognitive theory and have focused on judgments considering task-specific competencies or perceptions of self-efficacy, the self-efficacy theory denies any significance of the issue of autonomy (Bandura, 1989) placing importance only on competence. The self-determination theory holds that efficacy without perceived autonomy will not foster intrinsic motivation (Ryan & Deci, 2007).

The self-determination theory (SDT; Ryan & Deci, 2002) has become increasingly popular in understanding motivation and behavior in the field of sports. The theory examines individuals' reasons behind action (e.g., degree of self-determined motivation), how different types of motivation lead to different outcomes, and what social conditions increase or decrease optimal functioning through the satisfaction of basic needs (Duda & Treasure, 2010). For example, previous research (e.g., Chantal, Guay, Dobreva-Martinova, & Vallerand, 1996) indicated that elite-level performers display high levels of both intrinsic and extrinsic forms of motivation. Specifically, elite athletes tend to affirm extrinsic forms of motivation because of high social recognition, and monetary rewards which have been the currencies of elite sports.

The achievement goal theory (AGT; Nicholls, 1984; 1989) is another popular approach that has had a tremendous impact on sport motivation research during the past decade. AGT holds that achievement goals (task vs. ego) are held to be the interpretive lens influencing how we think, feel, and act while engaged in achievement endeavors. A considerable body of research has revealed that task and ego goal orientations are associated with qualitatively different behavioral, cognitive, and affective patterns that are likely to have an impact on short term- as well as on long-term participation. Findings revealed that task orientation was associated with positive motivational outcomes (e.g., adaptive learning strategies, enjoyment, intrinsic interest) (e.g., Duda, 2001; Roberts, Treasure, & Kavussanu, 1997), whereas ego orientation was associated with boredom, belief that deception is a cause of success, and reported anxiety (e.g., Duda, 2001; Roberts et al., 1997). However, several studies of athletes with different competitive levels showed that high task and high ego orientation profile is a desirable adaptive achievement profile (Duda, 2001).

A majority of studies on career transitions and concomitant changes in athletes have focused on career termination and its consequences, and the research investigating athletes within career transition experiences are very limited (Alfermann & Stambulova, 2007). Studies have investigated *why* and *how* young athletes got involved in organized sports and the process of termination of young (e.g., Brustad, Babkes, & Smith, 2001) and elite participants (e.g., Lavallee, 2000). Although career termination in sports has become a popular field in sport psychology research, which is evident among the growing number of scientific publications and conference symposiums, there is less extent of research that focus

on the broad range of transitions that athletes face during their sport career, and that most likely influence perceptions of the quality of their athletic involvement (Wylleman & Lavallee, 2004). Hence, the current study will investigate perceptions of the dynamics of motivation in different career stages in two highly recognized table tennis players.

# Key terms

## Motivation and achievement behavior

According to Roberts and colleagues (2007), motivational process can be defined as "the psychological constructs that *energize*, *direct and regulate* achievement behavior" (Roberts et al., 2007, p. 3). Using a social-cognitive approach, achievement can be seen as "the attainment of a personally or socially valued achievement goal that has meaning for the person in a physical activity context" (Roberts et al., 2007, p. 5). Duda (2007) argued that an extended literature in sport psychology indicates that ability, specifically *perceptions* of that particular ability is fundamental to task execution (e.g., Weinberg, Gould, Yukelson, & Jackson, 1981) and engagement (e.g., Roberts, Kleiber, & Duda, 1981) or disengagement (e.g., Burton & Martens, 1986). Thus, achievement is subjectively defined, and success or failure in acquiring a specific goal is a subjective state based on the individual's assessment of the outcome of the achievement behavior.

#### Goal orientations

Goal orientation theorists (e.g., Ames, 1992; Nicholls, 1989) suggested that humans are motivated to demonstrate and to achieve personal competence in achievement contexts. However, individuals differ regarding the goals they set for themselves and in the criteria they use to evaluate, interpret, and judge their competence in achievement domains. Based on individuals personal theory of achievement it is assumed that individuals are predisposed to act in terms of either *ego* or *task* involvement. Differences in these approaches may be a consequence of socialization processes through task- or ego involved environments (Nichols, 1989). When individuals are task-involved, perceived ability is processed in a self-referenced manner: emphasize lay on task mastery, exertion of effort, and development of one's skills or knowledge of the activity. When ego-involved, striving is marked by demonstration of normative referenced high ability and perception of successful achievement when individuals think they have exceeded or performed equally, or with less effort expended (Balaguer, Duda, & Crespo, 1999). Nicholls (1989) suggested that these two goal perspectives are orthogonal – individuals can be high in both task and ego orientation, or low in both, or high in one and low in the other (e.g., Roberts et al., 1997).

# Perceived competence

According to Harter (1978), competence is a multidimensional construct that is acquired by mastery attempts in different tasks, and consequently leads to development of behaviors and perceptions of control. Roberts and colleagues (2007) argued that a key distinction between task and ego oriented athletes is the way they define and assess competence. When a task goal is manifested, the concern is the integration of task demand, exerting effort and developing one's competence in a self-referenced manner. When ego goals are manifested individuals' main concern is to demonstrate superior competence in relation to others and/or to normative others. Task-involved individuals are more likely to develop competence over time compared to ego-involved individuals who feel competent when they are compared favorably in relation to others. Ego orientation may decrease perceptions of success, perceived competence and effort, particularly for those who are unsure of their ability (Roberts et al., 2007).

# Basic psychological needs

One of the fundamental tenets of self-determination theory, which will be explained in a broader sense shortly, is that fulfillment of basic psychological needs for autonomy, competence, and relatedness are necessary for facilitating self-motivation, social development, and personal well-being (Ryan & Deci, 2000). The need for *autonomy* reflects the need for experiencing oneself as an initiator and regulator of one's actions. The need for *competence* represents the need to perceive ourselves as effective in achieving endeavors. The need for *relatedness* refers to the need to feel a secure sense of belongingness. Psychological needs are important because it makes motivation a dynamic concept, which by definition is an energizing state - if satisfied, well-being will be enhanced; if not satisfied ill-being will occur.

#### Athletic career

Career development means proceeding through career stages and transitions. Athletic career is "a multiyear sport activity, voluntarily chosen by the person and aimed at achieving his or her individual peak in athletic performance in one or several sport events" (Alfermann & Stambulova, 2007, p. 713). Depending on the competitive level achieved by the athlete, an athletic career can be local, national, or international. Regarding the athlete's status, careers can be amateur or professional. According to Alfermann and Stambulova (2007), elite careers are usually associated with athletic excellence and high social recognition; on the other hand, satisfactory careers are associated with achieving an individual peak performance corresponding to individual resources and environment.

### Career transition

In a general sense, *transition* can be defined as "an event or non-event [which] result in a change in assumptions about oneself and the world and requires a corresponding change in one's behavior and relationships (Schlossberg, 1981, p. 5). One fundamental assumption regarding development in career transitions relates to a new view on transition as a *process* and not a single event or non-event (Alfermann & Stambulova, 2007). Transitions can be normative or non-normative: normative athletic transitions are usually predictable (e.g., transition from junior to senior level, from regional to national-level of competitions, from amateur to professional status, or from athletic career to life after sports), whereas non-normative transitions are non-predictable and are situation-related (e.g., loss of a personal coach, change of team, injury, or deselection). Transitions are also related to the developmental context in which they take place. These include transitions inherent to the athlete's involvement in athletic domain (e.g., athletic transitions), and those related to the athlete's psychological, psychosocial, academic, and vocational development (Wylleman & Lavallee, 2004).

## Theoretical frameworks

*Self-determination theory (SDT)* 

The SDT (Deci & Ryan, 1985; Ryan & Deci, 2000) is a widely accepted theory in psychology as well as in sport and exercise psychology research. It is the only major theory of human motivation that recognizes spontaneous and intrinsically motivated activity, and specifies the factors that either heighten or diminish it (Deci & Ryan, 2007). SDT, specifically its component theory (Cognitive Evaluation Theory; CET) proposes that three psychological needs, namely *competence*, *autonomy* and *relatedness* are essential for enhancement and maintenance of intrinsic motivation. When these psychological needs are promoted in the environment, both intrinsic motivation and internalization are facilitated. Conversely, when the social context thwarts or neglects one of these basic needs, intrinsic motivation, internalization, and positive experience diminish.

SDT highlights three broad types of motivation which include *intrinsic* motivation (self-determined behavior), *extrinsic* motivation (controlled behavior), and *amotivation* (non-intentional behavior). Deci and Ryan (1985) suggested that several different types of regulatory styles underpin these types of motivation which can be conceptualized along a self-determination continuum. Intrinsically motivated behaviors and actions are self-directed and are performed for fun, pleasure, challenge, and satisfaction that are embedded within activities (e.g., doing sports for 'the sake of the game' rather than for external constraints or reinforcements). On the contrary, extrinsic motivation incorporates a range of regulations that are characterized by an individual's goals being directed by some separable consequence (e.g., reward or punishment). Deci and Ryan (1985) proposed that various types of extrinsic motivation can be situated along the self-determination continuum ranging from lower (e.g., external regulation) to higher degrees of self-determined motivation (e.g., integrated regulation).

External regulation with the least self-determined aspect in regulation, represents actions that are performed to gain external rewards or to avoid punishment (e.g., an athlete who feels pressured to practice or compete by significant others) those are considered as externally regulated. Next on the continuum is introjected regulation where the activity is still externally controlled but the source of control is internalized (e.g., 'I will practice today but only because I can't deal with the guilt I will feel if I miss it'). Identified regulation is the third type of extrinsic motivation, where behavior is based on free choice but as a means to an end, with the athlete not considering the behavior as pleasurable (e.g., 'I will not miss any practice sessions, even though they are unpleasant, because I want to improve my ranking position'). The most self-determined form of extrinsic motivation is *integrated regulation*, which occurs when identified regulations are incorporated within the self, meaning they have been evaluated and brought into congruence with one's other values and needs (e.g., 'I practice my sport because it is important for my cognitive development'). Although integrated regulation do share some similarities with intrinsic motivation (e.g., self-determined), it is still considered as extrinsic because actions are performed to achieve a personal goal rather than inherent pleasure and joy (Deci & Ryan, 2000).

The final type of motivation located on the self-determination continuum is *amotivation*, which represents the lack of intention to act. Amotivation occurs when individuals do not receive contingencies between behaviors and subsequent outcomes, they see no value in the activity, or feel incompetent to engage in a given activity (e.g., 'I am participating in table tennis but I'm not sure that is worth it).

According to CET, competitive contexts have both *informational* and *controlling aspects* (Deci & Ryan, 1985). The informational aspect is associated with the notion that competitive environments can offer optimal challenge and competence feedback, which result in enhanced feelings of efficacy and intrinsic motivation. Conversely, competition often contains controlling elements, as athletes feel pressure to win, either from others or from their own ego involvement. Hence, competitive settings with pressures to win are expected to undermine intrinsic motivation, whereas emphasis on task-involvement and task mastery regardless of the outcome can sustain or enhance intrinsic motivation (Reeve & Deci, 1996).

# Achievement goal theory (AGT)

AGT (Nicholls, 1989) has its roots in educational psychology and brought into sport psychology by Duda and Whitehead (1998). In the AGT it is proposed that individuals are active and goal-oriented organisms that act rationally, and that achievement goals guide achievement beliefs, decision making and behavior in achievement domains (Roberts et al., 2007). A fundamental assumption of the achievement goal framework is that the meaning of achievement activities is what colors ensuing affective responses, cognitions, and behaviors.

These meanings derive from the achievement goals endorsed by individuals (Ames 1992; Dweck, 1986; Nicholls, 1984, 1989). Thus, it is assumed that achievement goals are the interpretive lens influencing how we think, feel, and act while engaged in achievement activities (Duda, 2007).

According to Roberts et al. (2007), a comprehensive goal of action in AGT is assumed to be the desire to develop and demonstrate competence, and to avoid demonstrating incompetence, which can be seen as an energizing process in AGT. Nicholls (1984) stated that individuals possess more than one conception of ability, and achievement goals and behaviors differ depending on perceptions of ability defined by the individual. Nicholls (1984) argued that two conceptions of ability are manifested in achievement contexts: (a) an undifferentiated concept of ability, where ability and effort are not differentiated by the person, either because the individual is not able to differentiate (such as children), or because the individual consciously chooses not to differentiate; and (b) a differentiated concept of ability, where ability and effort is differentiated by the individual. Nicholls (1976, 1978) argued that children primary possess undifferentiated concept of ability; they cannot differentiate between luck, task difficulty, effort and ability, hence children associate ability with learning through effort. Individuals' approach to a task or activity reflects their perceptions and beliefs about the activity they are involved in and the type of ability they wish to demonstrate. Thus, these perceptions and beliefs form a personal theory of achievement during the activity (Nicholls, 1989; Roberts et al., 1997), which reflects the individual's perceptions regarding how things operate in achievement contexts. These personal theories affect one's beliefs about how to achieve success and how to avoid failure respectively.

# Developmental model of transitions faced by athletes

Wylleman and Lavallee (2004) formulated a lifespan model which reflects the concurrent, interactive, and reciprocal nature of athletes' development in athletic, psychological, psychosocial, and academical/vocational domains. Moreover, it reflects normative transitions in each of these domains and a developmental or "whole career" approach as well as a holistic or "whole person" approach (e.g., development in various domains) (see Appendix 1).

The model consists of four layers: the top layer represents the transitions athletes face in their athletic development including: (a) the initiation stage, when youngsters are introduced to organized or competitive sports (at 6-7-yrs.), (b) the developmental stage, when young (talented) athletes enter a more intensive level of training and competitions (at 12-13 yrs.), (c) the mastery stage, during which athletes' participate at their highest competitive level (at 18-19 yrs.), and (d) the discontinuation stage, which represent elite athletes' transition out of competitive sports (from about 28-30 yrs. of age). While normative in nature, these age ranges are averaged over many sports and different athletes, and may therefore differ depending upon the type of sport. The second layer represents athletes' transitions occurring at the psychological level including childhood, adolescence, and adulthood. The third layer reflects the changes that occur in athletes' social development such as relationship with significant others (e.g., peers, parents, coaches). The final layer represents specific transitions related to academic (e.g., primary education/elementary school, secondary education/high school, higher education), and vocational level. For elite athletes, vocational development may begin after secondary education and may include a full- or part-time job in the field of professional sports (Wylleman & Reints, 2010), which may conquer with the athletic mastery stage.

# Previous research

Self-determination and performance

SDT posits that competence, autonomy, and relatedness are primary psychological needs that motivate human behavior across domains (Deci & Ryan, 1985). A large extent of research

examining motivation in sport based on the self-determination framework has mainly investigated recreational and non-elite populations (e.g., youth and student-athletes) (Treasure et al., 2007). There is a gap in the sport psychology literature concerning practitioners and researchers' insight into the motivational process at the elite level. An investigation of empirical literature provides some insights into the field to facilitate the understanding of the motivational process in elite-level sports.

A study by Chantal, Guay, Dobreva-Martinova, and Vallerand (1996) based on the tenets of SDT, investigated the motivational profiles among 98 elite Bulgarian athletes from a variety of sports by using the Sport Motivation Scale (SMS; Pelletier et al., 1995). Results revealed that less self-determined types of motivation (e.g., introjected regulation and external regulation) led to better performances. In a comparison with less successful athletes, elitelevel performers indicated higher levels of non-self-determined extrinsic motivation. Furthermore, Chantal and colleagues reported that "title holders and medal winners seemed more inclined to report external rewards and feelings of obligation and pressure as their primary sources of motivation that less successful athletes" (p. 179).

A qualitative study by Mallett and Hanrahan (2004) with Australian elite-level performers partially supports the findings of Chantal et al. (1996), and provides a deeper understanding of elite athletes' motivation, especially in less controlling social conditions. The authors suggested that elite athletes have multiple motives for participation that embrace the regulations on the continuum of relative autonomy or perceived locus of causality. Although, their findings indicated excitement, enjoyment, love of competing on highest level, and the feelings of relatedness with other athletes as important motives, less self-determined motives were also evident. Some athletes identified their motives with external rewards (such as money and social recognition) whereas others talked about sports in a job aspect.

Another study by Forzoni and Karageorghis (2001) examined the underlying motives for participation among elite soccer players across four age groups. The authors expected that as athletes progressed in age through to the professional stage, a significant increase in monetary rewards and pressure to achieve higher levels of performance would undermine intrinsic motivation and promote extrinsic motivation. Results indicated no significant differences across the age groups and the external rewards did not show to have controlling effect. Particularly interesting was that intrinsic motivation scores were relatively high for both groups.

Pelletier, Fortier, Vallerand, and Briére (2001) surveyed Canadian elite swimmers asking them to rate their coaching climate (autonomy supportive vs. controlling) and their perceived motivation using the Self-Regulation Questionnaire (SRQ; Ryan & Connell, 1989). The researchers followed the athletes over 22 months to assess continuation of sport involvement. Results revealed that controlling climates were associated with external and introjected regulation, and autonomy supported coaching were associated with more integrated extrinsic and intrinsic motivation. Furthermore, more internalized motivation predicted greater persistence over time, whereas controlled motives were associated with faster drop-out – the more internalized and autonomous the regulation, the more athletes manifested persistence.

A support for psychological needs within the SDT was illustrated in a diary study by Gagné, Ryan, and Bermann (2003), which examined experiences of motivation and well-being from practice to practice among young gymnasts. Specifically, researchers followed female gymnasts over a four week period. Multilevel analysis revealed that athletes with higher autonomous forms for motivation showed more positive experiences in sport and higher well-being. Further results showed that changes from pre- to post-practice experiences were directly associated with basic need satisfaction within practice.

A particularly interesting and controversial is the impact of competition on intrinsic motivation. In accordance with tenets of CET, competitive contexts have both *informational* 

and *controlling* aspects. The study by Reeve and Deci (1996) illustrated those athletes who felt pressured to win lost intrinsic motivation even when they won, whereas those competing in the absence of such pressure did not. These effects were mediated by their influence on feelings of competence and autonomy, as predicted by SDT.

# Achievement goals and performance

An appreciable amount of research has revealed that task and ego orientations are related to different behavioral, cognitive, and affective patterns in sport which may have an influence on short-term performance, and particularly on the quantity and quality of long-term engagement (Duda & Treasure, 2010). For example, researchers have found that task orientation is associated with positive motivational outcomes such as the belief that effort is the cause of success, problem-solving and effective learning strategies, enjoyment, and satisfaction (Duda, 2001; Roberts et al., 1997).

Studies with competitive athletes from various sports on different levels and age groups illustrated that high task and high ego orientation is one adaptive achievement profile (Duda, 2001). A possible explanation for these findings suggest that athletes who are high in both task and ego involvement have multiple sources of subjective success and perceived competence; they have the flexibility to focus on (or combine) task or ego goals depending on specific demands of the situation in practice or competition to enhance their motivation (Duda, 2001).

Research findings also demonstrated that task orientation is positively related to belief that one's level of physical ability is changeable and malleable (Sarrazin, Biddle, Famose, Cury, Fox, & Durand, 1996). This seems to be of great importance in the elite-sport domain because high level athletes reach their performance after many years of practice which most likely affect their levels of motivation. In contrary, ego orientation has been associated with boredom, the belief that deception is a cause of success, and reported anxiety (Duda, 2001; Roberts et al., 1997). Furthermore, ego orientation has been related to the belief that ability is a crucial determinant of success and the notion that sport competence is stable and a "gift" (Sarrazin et al., 1996). Such thought patterns may lead an athlete who doubts his or her ability not to be as committed on long-term participation as they associate sport achievements with "either you have it or not" terms of criteria.

## Career stages and elite performance

Qualitative studies by Bloom and colleagues (1985) with elite tennis players and swimmers revealed that athletes who achieved an elite level started their sport involvement by testing different sports and in a playful environment. This environment was gradually changed to include specialization in one sport and more practice time as the athlete progressed from the early stages of involvement to the middle and later years. More importantly, athletes were provided with stimulating environment and with coaches guiding their development.

In a qualitative study of transition into elite sport, Carlson (1988) investigated the development of 10 elite Swedish tennis players and compared their training activities with a control group of 10 sub-elite players. Results revealed that sub-elite players specialized in tennis at younger age (age 11) than elite players (age 14). Furthermore, sub-elite players practiced more tennis between the ages 13 and 15, whereas elite players practiced more tennis only after age of 15. Carlson concluded that early specialization did not favor the development of elite players but rather an all-around sport engagement was more important before adolescent. Studies by Stevenson (1990) and Hill (1993) showed similar results with international and professional baseball athletes.

Similarly, Bloom (1985) and Côte (1999) identified three developmental stages related to sport from childhood to adolescence: the sampling years, specializing years, and the investment years. Data obtained from athletes and parents were consistent with sport

socialization years (e.g., Carlson, 1988; Hill, 1993), pointing out that play and diversification at early age were crucial building blocks in children's physical, cognitive, and emotional development. Côte (1999) indicated that the role of the parents changed over the various stages of athletic development. During the sampling years, parents introduce their children to sample a range of different sports. During specializing phase, parents are committed and support to child's decision to be involved in a limited number of sports. In the investment stage, parents face various demands put on child-athlete by creating an appropriate learning environment rather than additional demands or pressure. Furthermore, parental involvement remained essential during the mastery stage.

The study of Bloom (1985) also showed that during the initiation phase, coaches rewarded young children for the effort they put in, rather than for the result itself – a positive reinforcement which encouraged children to remain in sport. In the developmental phase, coaches emphasize technical proficiency of the athlete and expect progress and development via hard work. During the mastery stage, athletes became more responsible for own practice and competitions, whereas coaches exerted higher demands upon these elite performers.

# Methodological approaches

The majority of research from a self-determination point of view in sports has basically focused on recreational or non-elite athletes (such as youth and university participants) (Treasure, Lemyre, Kuczka, & Standage, 2007). Treasure et al. (2007) argued that there is less extent of research regarding insight into motivational processes at elite level which by definition represent a very small segment of the general sport population. There is a plethora of studies grounded in achievement goal theory to date, but most of them are cross-sectional and only a few describe long-term interventions (e.g., Christodoulidis, Papaioannou, & Digelidis, 2001; Kokkonen, Jaakola, & Papaioannou, 2001).

The Sport Motivation Scale (SMS; Pelletier et al., 1995) is probably the most used scale to assess various regulatory types proposed by the SDT in sport (Pelletier & Sarrazin, 2007). The SMS assess amotivation, external regulation, introjected regulation, identified regulation, and three types of intrinsic motivation (to know, to accomplish, and to experience stimulation). Previous studies showed support for the structure, reliability, and construct validity of the SMS with various populations of different ages and cultural backgrounds, and with participants from different team and individual sports (see Pelletier & Sarrazin, 2007, for a review).

The achievement goal framework is a popular approach in sport psychology. In order to assess levels of task and ego orientation in sports and physical activity, Roberts and colleagues (Roberts & Balague, 1989; Roberts et al., 1998; Treasure & Roberts, 1994) have developed the Perceptions of Success Questionnaire (POSQ), and Duda and colleagues (Duda & Nicholls, 1992; Duda & Whitehead, 1998) have developed the Task and Ego Orientation in Sport Questionnaire (TEOSQ). Both have acceptable reliability and construct validity (e.g., Duda & Whitehead, 1998; Marsh, 1994; Roberts et al., 1998, cited in Roberts et al., 2007).

A majority of studies on career transitions were mainly concerned with career termination and its consequences. Transition by definition involves a developmental aspect and one may therefore expect longitudinal studies, but retrospective and cross-sectional studies dominate the field (Alfermann & Stambulova, 2007).

# Summary

Research to date within the self-determination approach indicated that the social context play an important role in the motivational process. Findings have shown that elite athletes display high levels of both intrinsic and extrinsic motivation (e.g., Chantal et al., 1996), which may be a consequence of the competitive sport structure. High level athletes tend to endorse extrinsic

form of motivation due to monetary rewards and social recognition. However, elite-level athletes display intrinsic forms of motivation as well, because competitive sports provide a plethora of possibilities to develop various skills and abilities to evolve personal competence. High levels of extrinsic motivation among elite athletes may not necessarily be beneficial on the long run regarding psychological well-being and sport maintenance. Athletes who internalize self-determined forms of motivation in an autonomy supportive milieu are likely to experience adaptive motivational outcomes (e.g., persistence, task perseverance, and coping strategies) that have shown to be essential determinants of performance and development in sport (Treasure et al., 2007).

Roberts et al. (2007) argued that it is the goals themselves that are critical determinants of achievement cognition, affect and behavior, which give meaning for the person to invest personal resources, as these reflect the underlying causes of achievement behavior in achievement domains. The authors underlined that the way a person interprets own performance, reflects what the person considers to be essential in a particular situation, and the person's beliefs about what it takes to be successful in a particular context (Roberts et al., 2007), and consequences of sport participation (Duda, 2007). It seems reasonable to state that individual differences in goal orientation need to be considered in systematic study of human motivation in the sport context (Duda, 2007).

Findings within a developmental approach indicated that early specialization in elite sports does not necessarily provide a successful transition to high performance sports (e.g., Carlson, 1988). More specifically, play and diversification in early age are fundamental for optimal motor-skill and psychological development (e.g., Hill, 1993). Furthermore, studies revealed that a stimulating environment together with social support from significant others (e.g., peers, parents, coaches) are essential for optimal development in later years (e.g., Côte, 1999).

# **Objectives**

There is a lack of in-depth qualitative research with a holistic perspective that investigates elite athletes' career stages and transitions from different motivational perspectives. The aim of this study is to examine dynamics of motivational forces across career stages among legendary Swedish table tennis players.

#### Method

# Research design

The design of the current study included two case studies. The data was collected from two legendary table tennis athletes using narrative interviews. The two cases were threated in separate ways and they will be compared in the discussion.

## **Participants**

Jan-Ove "J-O" Waldner and Jörgen Persson were invited to take part in this study. Both are considered as highly successful athletes as they achieved several major titles in their competitive career, such as World Championships (WC) and European Championships (EC). Both participants are active on elite-level, however, J-O stopped playing for the national team after the WC 2005 in Shanghai, whereas Jörgen is heading for a medal at the Olympics in London 2012. Both are considered to be the two most influential table tennis players of all times. J-O and Jörgen played a central role when Sweden broke the Chinese dominance in 1989 and kept the European (and Asian) spirit alive for more than a decade.

The most remarkable about J-O is that he had an unusually long professional career over 25 years in a complex sport which require speed, power and coordination among others. He was first discovered when he reached the final at the EC 1982 at the age of 16. He won 11 medals on youth at EC and several international titles on senior level before he turned 18.

Later on, J-O became world champion in 1989 and 1997, Olympic champion 1992, and European champion in 1996. Moreover, he achieved several prestigious international titles such as Pro Tours, World Cup and Top 12. J-O is the only player in the table tennis history who won EC, WC and Olympic gold in singles.

Jörgen is also a highly recognized table tennis player around the world. He became European champion for youth at the age of 14 and for seniors at the age of 20. After reaching the final at the WC 1989, he became world champion in 1991. Moreover, Jörgen has also achieved several prestigious victories including Pro Tours and Europe Top 12. Jörgen contributed much for Sweden's team victories throughout his whole career. He is the one of three players in the world who participated at 6 Olympics and heading now for his 7<sup>th</sup> in London 2012.

#### Narrative interview

The narrative interviews were based on the Narrative Oriented Inquiry Model (NOI) (see Appendix 2) which emphasizes that narrative in not merely a distinct form of qualitative data or a particular approach in data analysis, but that is it a methodological approach in its own right (Hiles & Čermák, 2008).

Narrative in-depth interviews were conducted where each participant was stimulated to tell their stories in retrospect based on perceptions of motivation in different career stages. An open ended and low structured interview-guide was selected. The researcher created each participant's lifeline, which acted as a navigation-map during the interviews. During the interviews the author adopted a position of active and empathetic listener encouraging each participant to tell his story with their own words and offering prompts to elucidate meaning and to obtain depth.

## Procedure

Participants were first contacted by phone and the purpose of the study was briefly explained. A meeting place and time were thereafter agreed and the interviews were shortly after carried out. The aim of the study and the informed consent was sent by e-mail and both participants agreed to take part in the study. Right before each interview, the purpose of the study was thoroughly explained. Each respondent was informed that participation was voluntary and that they were free to withdraw at any time without the need for reason for explanation whatsoever. Furthermore, the researcher reassured the confidentiality about the information they shared. Participants were informed about their rights to remain anonymous; however, they were notified about the probable benefits and drawbacks by publishing their real names in the study.

Before the interview-start, participants gave permission to tape-record the interviews. They were also informed that the interview material will be sent to each one of them for eventual comments in order to clarify the content. Moreover, participants were notified that the interpretation of the results will be e-mailed to them before publication. J-O asked the researcher to contact his brother regarding these issues. J-O's brother sent the material back to the author including slight modifications, and the agreement to publish J-O's real name in the study they both agreed upon. During a phone conversation, Jörgen claimed that he read the interview material and likewise, he agreed to publish his real name in the study.

During the interview the researcher stimulated the participant to tell his story in retrospect. By pointing at the respondent's lifeline, participant answered to questions such as "Could you please tell me what motivated you during this particular time of your career" or "Please tell me how you experienced the expectations of the environment right before the Olympics".

The interview with J-O took place in the lobby at Hotel Globen in Stockholm. The interview took approximately one hour in a relatively relaxed environment. During the

interview the participant was completely involved and seemed to enjoy the conversation. The interview with Jörgen took place at the Café & Company in Halmstad, which similarly took just about one hour. Although, the environment was relaxing and enjoyable, it got somewhat noisy as we got closer to the end of our conversation. However, the conversation was characterized by comfort and joy, and the respondent was fully engaged and seemed to enjoy re-living his past.

# Data Analysis

The interview analysis and interpretations were based on the NOI model (Hiles & Čermák, 2008). The interview analyses were carried out in the following order:

- Step 1: the author read the interview transcripts several times in order to become immersed with the content.
  - Step 2: after identifying main themes, a working transcript was created in English.
- Step 3: holistic-content and form was done by distinguishing the sjuzet and fabula after which a coherent story was created. Sjuzet is the *form* (how the story is told), whereas fabula is the *content* (what is told) of the story.
- Step 4: a critical narrative analysis was carried out to get insight into the contextual discourses (e.g., social, cultural, professional) in which the participants were involved and how these contexts influenced *what* and *how* the participants told their story. The results of the study will be presented as two cases based on the participants narratives.

#### CASE STUDY 1

J-O's tale: From mascot to genius

#### Introduction

My first impression of J-O was that he was easy going and a happy person. He made me feel comfortable right away as he started to chit-chat about my past as a former elite athlete. As we sat down, he seemed engaged and willing to share his story. During the interview he was emotionally involved, talked rather quickly and with a sense of humor, and he laughed out loud from time to time. He was open and eager to share his past experiences.

At the time of the interview J-O was 44 years old and still active on elite level (representing Fulda in the Bundesliga and Spårvägen in Stockholm), although he was no longer member of the national team.

# The Beginning of Love Affair

J-O's career spans over more than 35 years as a professional athlete. He has been a world elite player for more than 22 years. He has been called the Mozart of table tennis, 常青树 or "the ever green tree" in China, and is probably the most influential player of all times. He started to play table tennis at the age of 5 together with his two years older brother. The start seemed to be a kind of coincidence:

I and my brother started to play when we found a table in the bike-room down in the basement. We sat up a table at our grandparents and played all day. We played a lot of other sports too like soccer and tennis all the time. Finally I chose table tennis due to easy access to it.

Shortly after, he and his brother joined the elite-club Spårvägen in Stockholm, with only four tables available.

I sensed that I was talented, I and my brother, so I joined Spårvägen when I was six. My brother joined the club at first. They didn't allow me at first because I was too short. I was more like a 'mascot'. But when they saw me play I got to join them too.

When I asked him what made him continue with table tennis he said:

I was two-three years younger than my mates. I was always the youngest at the start and now the oldest at the end [laugh]. I felt I was at least as good as those at my brother's age and even better. I won everything already when I was a kid. And rumors went around in the country about the biggest talent of all times and all that. And I was pretty short too.

## Early days

Joining Spårvägen involved him in deliberate practices daily and competitions almost every weekend. Success did not mean much to him, even though he began to achieve results. J-O used his time on testing his boundaries of endless creativity and excitement. He tested new shots and new ideas all the time on practices, and on competitions as well, which sometimes caused some organizational trouble:

Sometimes I lost many games because it was so much fun to play. I played many different classes and went from quarterfinal to quarterfinal and the organizers came to me and said: 'Don't lose any unnecessary sets because our schedule won't work out. Win two zero because you're going to play semifinal' [laugh].

J-O joined the Elitserien (the Swedish national league) at the age of 12. He was the first athlete to play in the Elitserien at such a young age, a league which was highly recognized in Europe that included world class players. The time after that seemed to have an influence on him as table tennis became more and more central to his life.

## Chasing true love

His perceptions of sport engagement began to change as he quickly progressed and started to win titles on international level. He won eleven medals on youth EC and several Pro Tours on before he turned 18. When I asked him what success meant to him that time, he said:

It was huge. When I reached that age it was huge because the play has become more serious. It became serious at 14-15 because I had to make a choice about my schooling which I didn't find interesting then, plus that table tennis went so well. I went to China when I was fourteen and missed a lot of school already then. I wanted to play table tennis and my parents supported my choice.

Shortly after, he joined the elite group in the club which was characterized by deliberate practice and a culture emphasized by long and tough practice sessions he found exciting and stimulating, which gave quick results:

Six months later I defeated Lagerfeldt who was semi-seeded on the national championships and I got respect for that. I always had really good practice opportunities when I was a kid. And my brother pushed me and supported me which suited me perfectly.

I wanted to know how the social environment that surrounded him that time changed as he achieved higher results. So I asked him if he experienced increases in demands and expectations in any way, and he said:

No, never. To my parents it was important that I behaved appropriately. My father was happy when I was top-seeded and reached quarterfinals. He thought it was really good being among the top eight. He was always so positive. My parents were simple people and hard workers. And they were former elite athletes too. They played bowling on the highest level.

#### A dream within a dream

Reaching the final at the senior EC 1982 at the age of 16 had an overwhelming impact on him

that provided him with ignite of a dream:

I was about sixteen when I reached the final at the EC. Right after that my goals were to win WC and EC. I wasn't even ranked. I had to go through top-seeded after top-seeded. There were many good players I had to beat to get to the final: Klampár, Douglas, Bengtsson, Kalinic. But when I reached the final [pause], when I reached the final, it was an enormous feeling. It felt like winning the whole (EC). It was huge.

For him, it was all about winning already then which motivated him all along. He won so often and that was the only thing that came out of it – results, which can be seen as a way of measuring one's competence and progress. J-O constantly simulated practice sessions into highly competitive situations – he competed whenever he was in a table tennis environment by integrating handicap-systems in order to constantly challenge himself and to reach higher personal standards.

As he turned into a senior player, winning was still the major motivational force. However, he focused a lot on further developing his playing system physically, technically and tactically, which he argued was of great importance in order to progress and win titles:

The winning was still there but developing my table tennis game was enormously important to me. I wanted to develop my game all the time plus that I watched other players and tried develop and become at least as good as them at their best shot. That is what I tried to do too.

After winning several international championships, he reached the final at the WC 1987 at the age of 22. Several members of the national team suffered from a serious stomach disease, including him, which stopped him from playing the team events. Whilst some of them had to leave the competition, he chose to stay:

They wanted me to leave too but I refused. I prepared for this WC for a 'hundred years'. Shall I leave just because I am sick? I went to the final and played one of my best matches ever against Chen Yongkan and Teng Yi. I got strong allergic reactions afterwards and my blood count got bad. This is just an example of that I never gave up.

Being young and constantly heading forward was evidently followed by social recognition from the world arena but also by increases in financial status, such as monetary rewards and offers from top professional clubs that wanted him for no matter price. So, I asked him if money was a source that boosted his motivation:

No, never. It was cool that the club wanted me though. They made me an offer already the year before which I rejected. I was too young and I needed one more year to get ready. So I definitely did not play where the money was the most. I played eight years in Kalmar because I wanted to achieve good results with the national team. My goals were always to win as much as I possibly could like WC, EC and Olympics. Money has never been important to me.

## *The peak of love affair*

J-O reached the top of the world for the first time at the age of 24 when he defeated his teammate and rival Jörgen Persson in the WC 1989 final. "Jörgen was a bit nervous in the deciding game which gave me the opportunity to advance" as he stated in Falke (1997). He argued that he had a great advantage of being in the previous WC final in 1987 providing him with confidence and lust for revenge. On the upcoming WC 1991 he went to the final again but this time he got defeated by Jörgen. J-O reached the top of his career by winning the Olympics 1992, which was the only gold medal that Sweden achieved - an overwhelming experience that provided him with even more social recognition such as a national hero:

It was enormously huge. People celebrated at the square in Stockholm. It was crazy with limo and stuff. The days after that were crazy.

His motivational drive after he reached the top was to stay on the top. Nothing else motivated him. J-O was in the EC final in 1982, and he was still struggling to get his much longed-for EC title. People and the media speculated whether he still was capable of getting it and underestimated his capability:

I still had that 'damned' EC gold to fight for. I couldn't win that shit which took such a long time. And many people talked, that you'll never win that and all. And motivation to me was also what other people said which could motivate me even more. The Germans said that it's over already when I lived in Germany.

Finally, J-O achieved his EC trophy in 1996, 14 years after his first EC final, and his collection was complete. He achieved everything there is to achieve.

Despite the complete collection of major titles, J-O's victory at the WC 1997 is probably the most spectacular performance in the table tennis history. He literally outclassed the world elite by not losing a single game (winning 7 matches in the row by 21-0) throughout the whole single event. Interesting to note is that the time right before was characterized by doubts from experts and the media regarding his capability to reach the top. So I asked him how he usually reacts when he reads about himself, that he is incapable:

It is a motivational stuff for me. The more negative there is (in the media) the better it is for me. I've always had stuff like that. I get sulky and I bore my head down into a corner and practice like swine. I go out and do those idiot-runs of an hour, and even though I'm dead-tired, I can go out and just focus.

## Coming from behind

In 2002, at the age of 37, he suffered a serious foot injury out in public and few believed that he could ever come back. The media seemed more interested in his privacy and speculated what might have caused the injury, and whether alcohol was included at the time of the accident. Moreover, one year later, daily newspapers announced that J-O was addicted to gambling. At this time of the interview I was curious how he experienced the time before the Olympics 2004. Although he achieved better results than his team-mates at his come-back and was directly qualified, the Swedish Olympic Committee was not completely convinced about his full potential which caused a debate whether it was right to take that place from a younger participant. Finally, he got promoted and stated that he never felt in such a good shape as he did on the European training-camp right before the Olympics 2004. After causing an incredible surprise by defeating the second best Chinese (Ma Lin) and the best European (Timo Boll), he reached the semifinal which he finally lost.

Although winning was evidently a strong motivational drive, I needed to know whether winning was the only source that fed him with self-confidence to feel competent:

No, not always. There were many things. Many times it was OK for me to lose when I practiced and prepared well. When my preparations were OK and felt that I did all that... And then I didn't have any family so I could always focus. Jörgen has family and there was always some obstacle... So maybe that way [pause], maybe it has been easier for me but it depends on how you are as a person. So I didn't have anything negative and I could always focus on and talk table tennis with my brother. So there has been a lot of table tennis [laugh]...

Being bachelor (single) most of the time might have provided time and energy he needed in order to fully concentrate on table tennis - both preparations and evaluations. During the interview he mentioned his brother many times and how much his engagement contributed to his learning and development all the way. I needed to hear more about his environment and

how he experienced that throughout the years. This is also the time when I sensed that he got emotional during the interview:

My brother has been enormously important to me. And so were my parents. I had the best one could wish for. Two parents, whatever I did, as long as I did it in a proper way they were enormously happy. Not everyone has it that way nowadays. There is more push today. There was no push at all. Sometimes I was devastated when I came home and beaten. 'But you were still in the quarterfinal and he is ranked as number four in the world and not so many who is, and that is pretty good'.

J-O's statements illustrate autonomy support, reinforcement and encouragement from significant others that most likely had an impact on his self-perception and self-confidence, especially at the beginning of his journey. Some kind of push was however evident regarding practices when he was a kid:

If we had practice Monday, Wednesday and Thursday then I was supposed to practice. They could push me a little then. If I felt sick then I could stay home. And that was like my father did. He never missed one single day at work as long as he lived... He had that upbringing that the work has to be done... My family thought that if you have decided for one thing then you have to do it.

His parents and grandparents were truly interested in the boys' sport engagement and they drove together to practices and competitions. They were interested and gained insight in the whole table tennis environment.

My grandfather [laugh], he has seen all the matches and knew all the players in Sweden [laugh]. If he missed something, we needed to call him. 'How did it go in the fourth?'... So we talked a half an hour after I got home.

I created my own masterpiece!

However, I was somewhat surprised how little he talked about his coaches throughout his career, so I wanted to hear more about it. He claimed that many coaches were involved and supportive during his career. However, he was in doubt whether any coach particularly or in some specific way contributed to his successes:

No. I can't say anyone in particular... We had a lot of different coaches. There have been so many and they taught what they thought was right then. But I can't say that anyone has taught me anything specific, that they taught me to get better forehand or, not like that. No I can't say that... I experimented always a lot. And I learned enormously much when I went to China when I was fourteen.

At this time of the interview I could not help to think that it must be hard to get to the practice hall after he had won everything that there is to win, so I wondered what motivated him sacrifice time and effort on practice sessions:

I've won a lot but I've also experienced a lot of heavy losses... Like the time when I lost to Jörgen as a kid (EC for boys). Then I lost many times like when I had fifteen match-balls, had 2-0 against Äpplet. And those were damn tough because winning was the goal. But then I knew or got the idea why I didn't win and went through it with my brother and, eh, you had to make an inner search...

We were getting closer to the end of the interview and I was curious whether he was satisfied with his career as a whole and he said:

Well, it was nice (laugh). Of course, it could have been better but I can't complain. With some more effective yield I could have achieved much more. But I think that it was very good for me that I got knocked on the way. I got knocked every second every third year all the time and it never went straight... I lost against Äpplet in 1982 and that was really good for me I think...

Finally, I needed to ask him what he would recommend players in order to get the best out of their potential and to become successful athletes:

I think it's important to think for yourself and that you really to know yourself. You need to know what you have to improve and what you can improve and not completely relying on your coach like 'do this and do that'. I think players just practice and do what coaches tell them to do. You have to be flexible and think for yourself. And practices should be individually suited.

It is quite obvious that J-O argued that self-awareness and independency are essential factors for optimal functioning and for continuous personal development. These factors might be the key for individually suited effective learning strategies (e.g., constantly exploring the game by finding new solutions both technically and psychologically) which may create important building platforms for optimal development.

#### Summary

J-O and his two year older brother were involved in different ball-sports at early age. However, table tennis became the biggest passion. J-O sensed talent early and achieved quick progress. He started to practice more intense and rumors went around in the country about the greatest talent of all times. Success did not mean much to him in the beginning; he played for fun and he experimented a lot during practice and competitions. Although he continuously achieved results, he did not take table tennis seriously before the age of 11-12. A trip to China at the age of 14 provided him with great inspiration after which he guit school and chose to give table tennis a real chance. He perceived his parents as positive, highly interested, supportive and encouraging, and his brother in particular has meant a lot to him, to whom he had a great relationship to all along. He started to dream about success at the age of 16 when he reached the final at EC for seniors 1982. After that, winning major titles became the main motivational force. Everything circled about winning which gave him the confidence to feel successful. J-O's behavior as a young participant on practices and competition were characterized by competitiveness but also by playing and experimenting with new ideas. He integrated handicap systems on practice sessions in order to increase challenge and the quality of practice.

Although, winning was still the main motivational force as he turned into senior, improving the own game (e.g., by watching the elite) was crucial for further success. A stomach disease disturbed and even stopped many from participation at the WC 1987 (aged 21), he chose to stay and participate, and reached the final. Two years later he became world champion and Olympic champion in 1992. The motivational drive after he reached the top was to stay on the top. Nothing else motivated him.

His financial status increased as he became a professional player but money was never a driving force. J-O has definitely not played where the money was the most. He chose to play for less in Sweden in order to achieve high results with the national team. Money has never been important to him.

His victory at the WC 1997 is considered as one of the biggest achievements of all times where he outclassed the world elite without losing a single game. As several times before, the media underestimated him right before which gave him a tremendous motivational drive to convince them that they are wrong. The more negative there was in the media the more motivated he got. People lost faith in him after a foot injury 2002. However, he proved them wrong once again when he outstandingly went to the semifinal at the Olympics in 2004 by defeating the best European and the second best Chinese.

Although winning was his main motivational force all along, winning was not always the only information that fed him with self-confidence. He could accept losses when he prepared well to competitions. He was genuinely interested in the technical aspect of the game, but

particularly the psychological aspect (e.g., tactics) was his major approach. He and his brother analyzed a lot of videos in order to identify strengths and weaknesses of the top elite and effectively integrated these into his own playing system.

His brother has been very important for his successes, and so were his parents. He had the best one can wish for. He never experienced push from his parents. He adopted his parent's work-ethical philosophy that a work has to be done and that when you have decided for one thing you have to get it done.

J-O had a lot of different coaches throughout his career but he could not pick a coach that in any specific way has helped him to become successful. He has always been independent, curious and tested new ideas constantly – and a trip to China provided him with much inspiration and education.

J-O has won a lot but he also suffered a lot of heavy losses, which he is truly thankful for. Losing was tough when winning was the goal. However, losses generated the will to explore and deepen the self-knowledge (analysis with his brother), which provided him with building blocks for further improvements.

What makes J-O an outstanding athlete is that in addition to his endless creativity, he seems to get the best out of his potential when it matters the most. He favors disadvantageous situations when people do not have faith in him which puts him in the position to surprise.

Looking back at his career as a whole, J-O found his journey enjoyable. With more 'effective yield' he could have achieved much more. He is grateful for all the heavy losses all along which gave him a great learning opportunity.

He argued that in order to reach personal success it is essential to be highly independent and not completely rely on coaches. Practice sessions should be individually suited and based on individual prerequisites in order to build effective playing systems. Furthermore, discussions and sharing theoretical knowledge and experiences are crucial educational tools for continuous progress.

# CASE STUDY 2 Jörgen's tale: Unfulfilled dreams of a living legend

## Introduction

When I met Jörgen at the interview cite he took an initiative to make me feel comfortable. Although I met him several times before and even practiced with him, I felt a bit excited having a role of a researcher and knowing that I was about to dig into his past. He seemed relaxed and completely engaged. He seemed interested in sharing his previous experiences.

At the time of the interview Jörgen was 45 years old and was still member of the Swedish national team and represented Halmstad BTK in the Elitserien. For the time being he is participating at his 17<sup>th</sup> WC and heading for his seventh Olympics which will be held in London 2012.

# The beginning of the journey

Jörgen's career stretches over more than astounding 28 years and he is one of the most influential athletes in the world of table tennis. He is the only table tennis player in the history who participated at every Olympics since table tennis has become an Olympic sport in 1988. His biggest achievements include WC title in 1991 and silver medal at WC 1989. He started to play table tennis at a youth recreation center in Halmstad at the age of 7.

I experienced successes early. I played the district championships and at school, and everything circled around table tennis very early. ...It had a certain influence that Sweden had a lot of successes with the national team that time like Stellan Bengtsson and Kjell Johansson. There were legends who won EC and WC and all that. ...I wanted to be like them.

## *The early years*

After joining the local club at the age of 9, he started to practice more intense and competed almost every weekend. He participated at his first Swedish national championships in 1975 at the age of 9. Jörgen's first international tournament came at the age of 13 on youth EC 1979. Joining the national team included more frequent training camps which provided him with more deliberate practice and education.

He became youth European champion for the first time at the age of 14 by defeating his team-mate Waldner in the final which obviously made an impression on him.

Yeah, I won the EC in 1980, right. I defeated Waldner in the final and I have been in the quarterfinal in 1979. I beat him in the final in Poland and that was awesome. I was a European champion, for youth though. It was nice you could say.

Becoming a European champion at the age of 14 reinforced his dream to become a table tennis star. At the age of 15 he went to China for a month which gave him inspiration and a great learning experience.

...I saw that it takes quite a lot to become a good player. I had only one day off. It was very instructive because I learned to play against different playing styles. We got sparring all the time and there were penholders, pimples, defenders and all. I got a very good education there and I learned a lot that month.

Despite the passion for the game, the dream to become a star, and the curiosity to learn, I needed to hear what success meant to him then:

Well, success? You get some faith. You join the national team and you feel of course that oh damn, things start to happen, and you have that dream to become European and world champion. ... When you feel you achieve success early you feel you're on the right way. You're a national team member and you get a trip to China, you join the big national team camps and get good education all the way, you see what it takes and then you become also more open watching others and learn some, and damn, you feel that are not that far. And that you feel that you have talent and that you joined early already because I evidently felt that I had some. Many are talented but you have to take care of it. I got this talent in order to do this I mean.

His explanation of success here seems a rather mature reflection on the factors that caused a certain perception to feel successful at such a young age. Jörgen was highly confident and had a strong perception of ability already at young age:

I was pretty stubborn at that but I've been also lucky. But that's the way it goes when you reach successes early, you believed even more in it. And you built up your self-confidence too, plus that you've learned a lot on the way I mean, that there are no shortcuts.

## The meaning

By this time of the interview, in addition to his high competitiveness and high belief to his ability as a young participant, he was also convinced that hard work is essential to reach success. So, I wondered what made him sacrifice time and effort to reach higher performance.

Winning has always been quite driving. It has always been.

I could not help to think that it is unlikely to be a superior athlete for more than two decades without intrinsic reasons for participation. Winning seemed to be a strong driving force but I wondered if the activity was fun and enjoyable in itself.

Both, but winning is always satisfactory. You learn to win at early age but at the same time you learn also when you get beaten. ...Joining the national team was even more about winning. We competed in everything. It didn't matter if it was soccer or futsal or floor-ball or poker. It didn't matter...Competition

was always involved. ... And the whole group was like that, which of course influenced me.

Evidently winning became more essential after joining the national team — an environment that was characterized by endless competition he most likely adopted. But a highly competitive environment can make a person highly vulnerable when no social support from significant others is available. If Jörgen's self-worth relies too much on how he performs may be a threat not only on his self-esteem but it may be a hinder to achieve higher personal standards as well. So, I needed to know how he perceived the social environment that surrounded him.

My parents have always been interested. They never pushed me or so. They drove me to practices and picked me up. And people in Halmstad always stood up. ...I was in a good company and you got such a, eh, great fellowship. We practiced and competed a lot together back then and I had such a positive feeling with the club. So surely, parents always stood up and there were never a problem.

The club environment where he spent most of his time during his youth apparently played an important role as a source of belonging and social support. Additionally, his parents have always showed interest in his sport involvement and were supportive. After he won EC for youth at the age of 14, he received attention in the media which he thought was cool but there was no driving force in it.

# Dreaming of winning

The time after his youth EC victory, he became a professional player in Sweden. A few years later, at the age of 19, he joined the top elite in Germany where several other Swedish stars were. He experienced cultural differences such as high emphasis on winning including noisy spectators which he considered demanding but a positive learning experience indeed.

And it was like, oh damn, you can earn some money here. ...Suddenly you get bought by a German club in the Bundesliga you only heard about. It was a big step to get there. ...The Swedish security wasn't there, and winning was the only thing that mattered. If you lost you weren't worth a shit, which was a good thing. I was only 19 when I got there and became actually European champion the year after. ...When you played away you had spectators against you and all that. ...whereas when you played in Sweden you could barely notice if it was home or away, not really like that but the difference was big. And there you've learned to be tougher... You got a hard but positive education. There were good years coming there early. I've learned a lot there.

It seems indeed that he went through a lot emotionally by learning the hard way when no support was available during adversities. Although winning appeared to be the main driving force as he reached higher performances, I needed to hear if social recognition and higher monetary rewards (e.g., better contracts) have driven him in some way.

I was still driven by titles. Chasing titles was the reason I played for. And it is a pity that I wasn't interested in other stuff like economy and all, in order to get a better foundation. At that time you could make pretty good investments. But I wasn't driven by that. You were driven by winning EC and WC. ... The driving force was to win titles. So was it, early, all the time.

That's what I dreamt of and that dream came true in '86 when I won EC. And then that there is WC too. ... Yeah, and that is the driving force. That's why I started to play table tennis. It wasn't like, 'oh, soccer, do I earn more there, or tennis I could start with...' It was never like that. I tested of course both soccer and tennis but it's table tennis, that's where the biggest talents are. It could have been tennis, I like tennis a lot but my dream was to become a table tennis player.

The environment that surrounded him did not change much as he achieved higher results. He moved a lot and travelled around, which is a rather natural lifestyle for an elite athlete (e.g.,

representing the national team and a pro club abroad at the same time). Jörgen mentioned his father again and he had something more to add to the story:

It was a kind of strict there. I can tell that it (their relationship) had affected a few championships because of problems like that, which are not to be found in the result statistics. At WC 1993 in Gothenburg I wasn't in balance. I had a lot of problems then. I played and it didn't stand in the result books, that I had problems. ... I got knocked up on the way I mean. But I always came back and that has motivated me too.

Jörgen perceived his father as strict, pushy, and having high demands and expectations already at younger age. His father wanted to get more and more involved but Jörgen refused to corporate with him and chose his to rely on his coaches in the continuation.

# Passion and philosophy of success

Jörgen has always had people he could trust and talk to. Many people have been involved during his career but he has also become more independent along the way. He argued that you have to give a real go otherwise it is hard to become a good player. Furthermore, in addition to coaches' support, as a player you need to be highly independent as well.

...I've always loved this sport and stood on my own feet and thought for myself, even though I had my coaches. So I had my own philosophy and had my own ideas.

During his youth he had many coaches and he perceived these as supportive and helpful in many ways. Joining the national team he experienced his coaches as highly competent. He practiced with world class players who were very inspirational and educational – they practiced hard even though there was a big level difference between them.

Jörgen became European champion in 1986 at the age of 20. The WC 1987 did not bring any trophies except in team events. China dominated the world and Sweden was the only one who took the fight against the Chinese. Without standing a chance at the three previous WC, Sweden managed to break the Chinese wall in 1989. Jörgen argued that even though they were outclassed in the past they did not give up hope by being patient, working hard and the right way in order to develop the game and to become more complete. Although Sweden went all the way in 1989, Jörgen was however truly disappointed after losing to Waldner in the singles final.

I lost only one match on the whole WC. That was tough. That loss was heavy because you know that it's hard to reach a WC final that goes every second year. And I got such in 1986; take your chance when you get it. ... So when I lost in 1989, I thought, oh damn, maybe I will never get that chance again.

Suffering from some setbacks the time after 1989, he reached the final at WC 1991 where he this time took his chance by defeating his rival Waldner. Evidently he was strongly driven by winning.

Driven by titles, yeah, like hell, all the time. But then when you reach your goal and become the best in the world, it was an enormous satisfaction. And then sometimes during downs you have such a damn self-confidence afterwards. And maybe that satisfaction, that you become a bit satisfied as European and world champion before the age of 25...

The years after achieving two major titles were followed by great adversities with less successful performances such as Olympics 1992 and WC 1993. Although, once again he contributed to team gold at WC 1993 he was not satisfied with his performance in single events. In 1994 Jörgen suffered a car accident that caused a neck injury. A rehabilitation process of six months followed. He felt he was about to lose the meaning of it all:

...I lost my motivation. I played but there wasn't any joy. Then you're in trouble. So I had a break there. And then as I walked around, I felt that I wanted to come back. So, I came back in 1995.

From being close to leave his professional career behind, he went almost all the way in 1996, when reached the EC final, which he found truly satisfying. Jörgen and J-O were two highly influential performers who received much attention in the media and the table tennis world. So I was truly curious whether social recognition and the media was a source that made him feel competent and someone special in any way:

No, that has never been. Of course, I noticed that I was more famous but that didn't motivate me...

I know when I'm no longer capable!

As he continued to talk about the media, I noticed dissatisfaction in his utterance and even a slight of bitterness. Apparently the media expected him to finish his career several times before, as his performances went up and down after the injury. A need of control of his own career seemed obvious:

...I decide myself when it is time to finish. I can pretty much feel that myself. I went through that in many years like 'damn, you didn't quit yet, you didn't quit yet'. But at the same time, when you have the motivational force, you want to continue. I can feel when I'm no longer capable and I don't want anyone else to decide when I should quit...

Being an attractive performer does not only involve high social recognition but also higher monetary rewards which seem go hand in hand. Although I felt a bit pushy by asking the same type of question several times, I still needed to be convinced whether money gave him a reason to strive to reach success.

No. Of course, I noticed that I got a bit more money. After some time I noticed that I earned more. But there was no driving force in it because if it was, I would have made an investment instead... It is through success that you earn money. If I play good, better times will come. So, money has never been a driving force. It was more about winning, always...

The way Jörgen puts it, seems obvious that increased financial status is a consequence of performance success. Monetary rewards do not give any specific information about competence. Winning titles on the other hand may provide more information about competence (outcome goal) which in turn may be a motivational force for athletes (e.g., getting in the history books and being remembered).

Jörgen established a family in 1996 and needed to face additional challenges. After a few less successful years, he played a crucial role at WC 2000 when Sweden, once again, defeated China in the final. Additionally, he reached the semifinals at the Olympics in 2000. Although the media and so called "experts" underestimated Jörgen and J-O several times before big events, often because of their age, they received high recognition because they time after time reached their highest potential at the biggest events. I wondered what he thought about when people do not count on them:

Yeah, we were strong there. It has been a bit of the motivational force as well. We have been rivals and we took advantages of each other. We have driven each other.

I think it's about time to leave it behind...or maybe not!

In order to make the sport more attractive to public (e.g., decreasing the speed of the game), the International Table Tennis Federation (ITTF) made regulation changes related to racket

characteristics, counting system, serving rules, and ball size. Jörgen argued that no one can underestimate the power of such changes. In order to remain successful, these changes required patience, effort, and creativity in order to adapt physical, technical and psychological aspects of the game.

Although Jörgen has achieved several titles with the Swedish national team on EC and WC, he had less successful performances in singles after year 2000 including Olympics 2004. He decided to finish his career and moved to Qatar to work as a national team coach in 2005. I was curious why he chose to end his career as a player:

I didn't feel good and I felt I needed new challenges. That's why I change to new clubs sometimes. And sometimes I didn't do that in purpose. I need to find new motivation and I feel that I'm stuck here... So I change to get new energy. And with Qatar was like that too, in 2005. I played the WC and I felt that, no, it's no fun to go to the hall. And then the offer came and I took it...

During this year Jörgen experienced that he could not completely identify himself with the coach's role. He went to the WC 2005 as a coach and spectator. He watched the world elite and recognized that he is still capable to challenge the top performers. So, once again, he started to compete, and one year later he reached the semifinal at his sixth Olympics 2008. The media, as so many times before, completely underestimated his capability right before which he considered was highly motivating.

Reflecting on his career as a whole he stated that without parents "you are no one". They have always shown interest and he never felt too much pressure. However, the story so far indicates that his fastidious father affected their relationship and sometimes his performances in a negative way. Halmstad BTK and the people involved there were inspirational and motivating and so was the Table Tennis Gymnasium. Stellan Bengtsson in particular has been a great friend and a mentor which meant him a lot and who is still supportive and inspirational. However, while looking back he argued:

How I look at it? I can't say I'm satisfied, I can't say that. I cannot look back because I'm still active so I don't look back. I try not to sum up. Not until I have finished the last chapter that I expect in London. So I don't look back... The day I quit, I will sit down and I hope that I will be satisfied. You will surely find certain thing like, damn...

...But I can tell that I hope, and if London will not come, it will always stick. It's going to be something that I will never be happy with. Now I had six trials and I couldn't really...

Jörgen is heading for his seventh Olympics and he has a strong desire to win a medal. An unfulfilled dream gives him the energy needed to strive for a longed medal to make his collection complete. Although he was close a few times before, still today, chasing titles is his main motivational force:

Yeah, it is still today and an Olympic is the only one I don't have, a medal, and that is what still motivates me today. I thought that there (2008) was my last one, but I give myself another try...

## Summary

Jörgen was involved in several sports at early age. He chose to play table tennis at the age of 7 and experienced successes quickly. He sensed his talent and joined a local club after which he practiced more intense and competed almost every weekend. Being inspired by Swedish table tennis stars, he wanted to become just like them. He joined the national team at the age of 10 and became youth European champion at the age of 14. One year later he went to China, which provided him with inspiration and great learning. Early successes reinforced the dream to become European and world champion. Jörgen have perceived his parents as interested,

supportive and helpful. Daily practices and competing almost every weekend provided him with fellowship and relatedness towards the club.

Jörgen received attention from the media at early age which he claimed was not a motivational source. He became a professional player in Germany at the age of 19 where he experienced cultural differences. The concept of winning seemed to be of another dimension – the only thing that mattered there was winning and he felt worthless when he lost. His financial status increased as he achieved higher performances but there was no motivational force in it. Winning was the main motivational drive and the goal was always to win EC and WC titles.

The environment that surrounded him did not change much as he achieved higher results through his career. Although his father seemed strict and pushy already when he was 10, he refused to corporate with him and chose to rely on his coaches. Jörgen has always had people whom he could trust and talk to. Although he always felt his coaches support, he constantly tried to stand on his own feet with own ideas and philosophy, which he argued are crucial in order to develop.

Jörgen became European champion for the first time in 1986 at the age of 20. He reached the final at EC 1989 in singles, and played a major role when Sweden defeated China for the first time since 1973. Although being outclassed by the Chinese several times before, he experienced a positive spirit in the team full of hope, and practices were characterized by quality in order to develop and become a more complete player. However, WC 1989 was tough because the only match he lost was in the singles final against his team-mate and rival, J-O Waldner. He was strongly driven by winning titles which was the motivational force all along; he took revenge at the WC 1991 where he became world champion by defeating his rival in the final.

Being both European and world champion before the age of 25, the time after was followed by less successful performances, which raised questions about finishing his career. Jörgen suffered a neck injury after a car accident in 1994 and he lost motivation – he played without joy which he found concerning. After a break he decided to come back and surprisingly reached the final at the EC 1996 which was satisfying and truly motivating.

Being successful included higher social recognition and increases in financial status, which has never been a driving force – winning was. Practicing with national team members was like playing the finals on big events, which also was motivating and developing.

There have been major changes in the regulations (e.g., racket, ball-size, counting system) after 2000, which required effort and creativity in order to make successful adaptations.

A few less successful years after 2000, he questioned his ability as an elite athlete, and once again, he lost motivation to continue. He became the head-coach for the national team of Qatar and moved there in 2005. He could not fully identify himself with the coach's role and decided to make a come-back once again. Being away from the playing scene for more than a year, Jörgen exceeded all the expectations by reaching the semifinals at the Olympics 2008.

The media underestimated his capability many times right before big events which he found stimulating and motivating. Jörgen and J-O have been team-mates and each other's conquerors over a long time. Even though they are rather different, they took benefits from the reciprocal competition that constantly existed between them by stimulating and learning from each other.

Jörgen argued that sometimes he needs to take a fight to get things done, such as running or going to gym. When he decides to make an effort, he is doing it because he truly believes that a certain goal is possible to reach. He knows what needs to be done in order to get the best out of his potential, which truly motivates him, even though it is sometimes a challenge.

#### Discussion

The main purpose of this study was to investigate what motivate elite athletes to achieve high levels of performance, particularly over a long period of time. More specifically, the objective of this study was to examine how two legendary table tennis players perceive the dynamics of their motivational force in career stages in order to remain successful on the long run. Are high level athletes a consequence of their innate talent and competitiveness, or are high personal achievements a result of a facilitating environment? Results obtained from the narratives revealed that participants were highly passionate about their sport, were motivated by personal goals (e.g., winning major titles), they displayed high perceptions of their ability, table tennis was central to their lives, they were surrounded by facilitative environment, and their psychological needs were satisfied.

Narratives play a crucial role in psychology: they dominate human discourse and are foundational to the cultural processes that organize and structure human action and experience. Narratives enable human experiences to be viewed as socially positioned and culturally grounded. Furthermore, narratives offer pragmatic and persuasive responses to deal with life events (Hiles & Čermak, 2008). Hiles and Čermak (2008) argued that the function of narrative is that it has a primary role in the construction and maintenance of identity – we establish our identity position through our stories.

An investigation (Lønnebotn, 2007) by the International Olympic Committee (IOC), illustrated that table tennis is the world's largest individual sport involving approximately 300 million athletes which is almost as big as soccer (320 million), and four times bigger than tennis (80 million). At the recent World Table Tennis Championships 2011 more than 122 nations participated which makes one of the biggest sport events in the world. The large number of participants indicate that it is indeed a great challenge for an athlete to achieve success in such a big and complex sport that require power, speed, stamina, and the foremost, psychological characteristics.

J-O Waldner and Jörgen Persson have been two most influential athletes in the table tennis world for more than two decades. Sweden broke the Chinese dominance in 1989 when J-O and Jörgen among others, demonstrated that it is possible to overcome obstacles. Although an illusion for a great majority, J-O and Jörgen became role models, providing hope for the whole table tennis population including China, where J-O in particular was the second most famous person after Bill Clinton in the beginning of 2000.

## Critical narrative analysis of J-O Waldner

At the initiation phase (age 7-9 yrs.), J-O was involved in different sports, however table tennis was the sport he got truly passionate about. He sensed his talent rather soon - he was shorter, younger and better than his fellow competitors. Moreover, as he stated: "everybody knew I was talented" and "rumors went around in the country about the greatest talent". Although J-O started to achieve higher results, he could not take the sport seriously. He experimented a lot and constantly tested new ideas on deliberate practice sessions, and more importantly, during competitions: "...sometimes I lost many unnecessary games because I had too much fun". It could be argued that competitiveness combined with a high social recognition from the table tennis environment at such a young age reinforced his perceptions of competence. Moreover, his brother's involvement meant a lot to him as a playing partner and companion; so did his parents and grandparents who were enthusiastic and highly supportive, which made his sport engagement a positive experience.

J-O's sport involvement started to become more serious during the developmental stage (age 11-14 yrs.), and integrating a playful approach was essential, which gave him psychological stimulation, enjoyment and personal challenge. Although already highly

successful with the national team, the game got more serious: "...it became serious after I quit school because I had to make a decision about my schooling but everything was up to me though". J-O got the opportunity to make a decision on his own by being supported by his parents. Furthermore, the behaviors of his significant others did not change much as he achieved higher results: "my father was happy when I was top-seeded and went to the quarterfinals" and "he was always so positive". Being talented is subjectively defined and can be interpreted and handled in different ways (e.g., informational or controlling aspect), which may put pressure on the athlete when he/she attempts to live up to the expectations of others. An autonomy supported environment from parents and coaches provided J-O with optimal conditions to feel self-determined. The social support and encouragement that he received from his parents, combined with his never ending exploring attitude, gave him the optimal inner mental state - to be the initiator for own thoughts and actions (and taking consequences of these), most likely provided satisfaction, control over own development, which further boosted his motivation.

J-O was the first foreign athlete to practice in China and to study their national sport. After a longer stay in Shanghai at the age of 14, where he got truly inspired and learned a lot, he decided to quit school to reach for his dream. Although J-O visited the best of the best, when he got back home, he knew what he wanted to do the rest of his life. Not only that he got inspired but more interestingly, his belief to his ability may have increased by watching and testing the world elite. He seemed to make precise judgments of his own ability to make future predictions of what he is capable to accomplish.

Although, J-O displayed high competitiveness all along, winning became important when he entered the mastery stage (aged 15-...). More specifically, winning titles was the main motivational force: "...for me it was all about winning. That's what it was all about already then. That's what has driven me. I won so often and that's what came out of it..." In order to see how efficiently he can use and combine technical and psychological aspects of the game in relation to others, the result statistics was the final and most "visible" source for competence evaluation.

J-O made a great impression on the world when he, basically unranked, reached the final on the EC 1982, only 16 years old. He stated that it was an unexplainable feeling to get that far on such a big event, and "after that I wanted to win WC and EC". Already at the age of 15, he was involved in tough practice sessions which he enjoyed and found genuinely stimulating. More specifically, J-O simulated his practices into highly competitive settings: "I integrated handicap-systems on practices to challenge myself..." Subjectively identifying himself with this particular environment, he continuously added new dimensions to his competence which facilitated constant progress.

Winning titles was still his major motivational approach as he turned into senior (18 yrs. of age), but developing his own game was crucial for further improvements: "...developing my game was enormously important to me". Observational learning was highly evident as he got more mature and argued that: "...I wanted to develop my own game all the time plus that I watched other players and tried to become as good as them at their best shot". J-O was deeply interested in all aspects of the game and was highly selective – he analyzed a lot, picked the best shots from everybody and integrated these into his own game to evolve and build his future weapon. J-O had the ability to constantly surprise his opponents with something new – top Chinese coaches argued that they could always find weaknesses at all players, but J-O was different; he always had the ability to renew some details of his game from one competition to another, making it hard for coaches to create a clear picture of his game. In addition to his creative playing style, J-O's psychological approaches (e.g., tactics) were based on his opponents' weaknesses and applied these when they were highly relevant in a specific situation. His predictions of his opponents' actions were accurate and he always adapted

tactics on the dynamical nature of a game. J-O's creative approach might explain why coaches could never really identify what he was up to.

High social recognition and monetary rewards use to go hand in hand. He reached the final on the WC 1987, and in a recent interview by Marshall (2011), the Belgian legend Jean-Michel Saive, claimed: "I started in an era when Europe had no chance against China but then in 1987, at the WC in New Delhi, things changed. Jan-Ove Waldner was ill during the team events, he couldn't play. And then in the singles he was unbelievable; he reached the final, he lost to Jiang Jianliang but he opened the door". J-O provided confidence and hope for all Europeans in a time when China was invincible. Interesting to note is that at the Olympics 1988, just one year later, China did not win a single medal.

After he became World champion in 1989, and Olympic champion in 1992, J-O was a national hero. According to him, neither social recognition nor monetary awards have been a driving force to him, but he claimed: "...it was cool though that the club wanted me for no matter price", which illustrate an informative interpretation of his competence. A controlling aspect might have had another impact on his motivational drive, particularly if his financial status would have been unstable. His general philosophy though was that effort and personal accomplishments will be rewarded. He did not play where the money was the most – he chose to play for less in Sweden in order to reach a higher personal purpose.

After he reached the top his main goal was to stay on the top. He was struggling to win the EC title, which took him 14 years after his first final in 1982: "...that shit took such a long time to achieve and people talked". People and the media questioned his ability several times whether he still was capable and stated: "...motivation for me was also what people said which could motivate me even more". Moreover, J-O claimed that "...the more negative there was (in the media), the better it was for me", meaning that the more they questioned his ability the more psyched up he got to prove them wrong.

J-O's playing style was multidimensional which obviously made him spectacular to watch. His exploring and "playing" approach was evident later in his career. One example is the semifinal against Ma Lin on WC 1999, where he was on big lead but he intentionally began to "play with the mouse", a match he finally lost. His gambling attitude was evident throughout his whole career except on WC 1997. It may be argued that J-O did not necessarily display a need to demonstrate superior performance with less effort exerted, but rather, the need of personal challenge and excitement by letting the opponent real close to sense his real threat (pulling himself to the edge of his competence). Constantly testing his outermost boundaries might have provided him with greater perception of competence and a bigger satisfaction of success.

# Critical narrative analysis of Jörgen Persson

During the initiation phase (age 7-9 yrs.), Jörgen was involved in different sports and became passionate about table tennis. He sensed his talent and got inspired by previous legends: "...it had a certain influence and I wanted to become like them." Feelings of competence combined with a sport with high status may have inspired him and reinforced the desire to become a table tennis star. Nicholls (1976, 1978) argued that children cannot differentiate between luck, task difficulty, effort and ability before the age of 12. Although this may be a general assumption, it is rather surprising that Jörgen specialized in table tennis at such a young age without recognizing task difficulty and effort. Table tennis is a complex individual sport that requires multidimensional ball-sense, both power- and fine-motoric movements, and a great deal of psychological characteristics (e.g., tactics). A recent study by Moldovan (2011a) with Swedish table tennis players on different levels indicated that the sport is relatively high task oriented which may illustrate a mastery oriented culture. Typically, coaches focus a lot on tactical strategies, particularly on competitions, comparable with chess (e.g., emphasis on

opponent's weaknesses, where to place the ball to win the point), which additionally provide young participants with high task-related efficiency - a more precise and detailed perceptions of own competence may be motivational. Although Jörgen seemed highly competitive at a young age, interplay between his passion for the game in a high task oriented culture may possibly accelerated his early specialization in sport.

During the developmental stage (age 11-14 yrs.), Jörgen became a national team member, and played his first EC at the age of 13. "Winning became more important when I joined the national team" as he claimed. Although more frequent deliberate practices and competitions, and taking part on national team camps supplied him with education and competitiveness: "winning titles was a major driving force" and "winning gave me the biggest satisfaction". He won EC for youth 1979 by defeating his team-mate and rival J-O, which obviously had a great impact on him. A trip to China gave him a bigger cultural perspective, much inspiration and knowledge. It is however worth to note that recognizing what it takes to reach success can either increase or decrease feelings of efficacy, depending on how competence related information is processed. Evidently, he had a strong belief to his ability and stated that "I felt that I had talent and that I joined early because I evidently felt that I had some. Many are talented but you have to take care of it". Although he seemed clearly aware of his ability, he emphasized own responsibility and work-ethical aspects, that hard work is crucial in order to reach personal success. Furthermore, the social environment (e.g., coaches) may have additionally reinforced how talented he was which gave him hope and confidence to strive for personal success.

Jörgen continued to achieve higher results as he entered the mastery stage (age 15-...), he became first professional player in Sweden then in Germany at the age of 19. He experienced cultural differences and in particular, the concept of winning was of another dimension in the eyes of the Germans, or as he put it: "the Swedish security wasn't there and only winning mattered. If you lost you weren't worth a shit... The difference was big and you learned to become tougher". Interesting to note is that Jörgen found this environment emotionally challenging but effective and educational, and already a year later he won his first senior EC title 1986. He is rather thankful for learning the hard way in Germany, which he considered to be his second home, and where Sweden broke the Chinese dominance in 1989.

After a great disappointment caused on the WC singles final 1989, he became world champion 1991 that gave him a huge satisfaction. A few less successful years followed and a car accident in 1994, forced him to question his ability: "...I lost motivation. I played but there wasn't any joy. Then I felt in trouble". He made a successful comeback in 1996 but another period of less successful accomplishments after 2000, he again questioned his capability. Jörgen chose to end his career and became the head-coach of Qatar: "...I didn't feel good and I felt I needed new challenges. That's why I change to new clubs sometimes... So, I change to get new energy". One year later he surpassed all expectations by reaching the semifinals at the Olympics 2008.

His father was strict and expected much from him already at the age of 10, and apparently several years later as well, that obviously had a negative impact on his performances on big events. It might be that his father, as so many other parents, when they realize their children's potential they set unrealistic goals and put pressure in order to take part of the fame and pride that future success may bring. The question is whether Jörgen's competitive character is a consequence of a behavior he adopted before or after he started to play table tennis in order to live up to the expectations of his father, or whether table tennis was a mean to achieve recognition and self-worth in the eyes of a significant other. Jörgen was evidently concerned with the result-statistics when he mentioned how personal problems affected his performance which is not visible in the result-statistics. This statement further reinforced the main motivational force behind participation – winning and getting in the history books. And as he

stated: "...I got knocked up many times on the way but I always came back. And that has been motivating too".

The structure of the social environment that surrounded him, such as social support and encouragement (e.g., the club and national team) seemed to have a great importance in his development. Although feeling some pressure and discomfort from home, he seemed to be in need of encouragement and social support from coaches and players. Although he got a lot of help from coaches, especially when he was younger, he argued that giving it a real go and being responsible and independent are essential to reach success: "...I have always loved this sport, stood on my own feet and thought for myself, even though I had my coaches... I had my own philosophy and I had my own ideas."

Jörgen experienced easy access to practices with the elite which provided him with inspiration and education; they fought and practiced whole-heartedly with him, even though big level differences were evident. Having competent people available was of great value especially when Jörgen knew what and how he wanted to achieve. Moreover, he was wide open to learn in order to be updated with new knowledge which was crucial for further improvements.

Being highly successful resulted in high social recognition and increases in monetary rewards. Jörgen stated that "...of course I noticed that I was more famous but that didn't motivate me". However, media caught his attention when the content was negative or when it questioned his ability. More specifically, Jörgen seemed to be bothered when people and the media too often expected him to end his career: "...I decide myself when it's time to finish. I can pretty much feel that myself... I can feel when I'm no longer capable and I don't want anyone else to decide when I should quit". Jörgen seemed to be in need of control of his career and stated that "when you have the motivational force you want to continue". Some lead to the general assumption that Jörgen possess a combination of unrealistic perception of competence and/or a strong desire to fulfill his dream - winning an Olympic medal which he has been fighting for a long time. But, at the same time, these typical assumptions those underestimate his capacity has shown to be a strong motivational force, as he several times exceeded the expectations of others. An example is the Olympics in 2008, where he, after a period of adversities, reached the semifinals (but did not win a medal).

# Comparison of the two cases

A comparison of the two cases revealed that J-O's and Jörgen's stories are more similar than different. They are both part of the same generation. Even though they seem different in some aspects such as personality and their view of life, results indicate that table tennis was their biggest passion and was central to their lives, both have been highly competitive all along, wining titles was their main motivational force, they were surrounded by supportive environment, and that their psychological basic needs were satisfied. However, results also revealed that they not only differ in their life course throughout their career – Jörgen has established a family whereas J-O has mainly been a bachelor (single) during his career. Furthermore, the way they perceived success seemed to be somewhat different.

The results obtained from the narratives indicated that both J-O and Jörgen were involved in several different sports at the initiation phase. Finally, table tennis became the sport they devoted their whole life to. Both sensed strong beliefs to their ability early, they joined a club and started to practice more intense and competed nearly every weekend. Both were younger than their competitors and reached successes quickly. However, whereas Jörgen dreamt of becoming a table tennis star shortly after he started to play, J-O played and competed mainly because it was fun and joy. Furthermore, both participants' significant others showed interest and provided them with social support needed for a positive sporting experience.

Entering the developmental stage, J-O and Jörgen joined the national team at the age of 10,

after which winning became significantly more important, especially for Jörgen. Although already competing internationally, J-O did not take the sport seriously until the age of 11-12 – he constantly tested new ideas on practices and competitions. For J-O, table tennis became serious after he quit school at the age of 14. Being team-mates and each other's conquerors already then, they met each other in the final at the EC for youth 1980, after which they started to dream about winning WC and EC. Moreover, their practice environment was characterized by deliberate practice sessions which they both found stimulating; in addition, coaches showed interest and were supportive. Whereas Jörgen experienced his father as fastidious and controlling, J-O's parents seemed more autonomy-supportive. Jörgen felt particularly related to the club environment, whereas J-O had a close relationship with his brother who was genuinely supportive.

For educational purposes, both J-O and Jörgen were sent to China which provided them with a bigger perspective of the competitive sport and inspirational learning: they got a foretaste of what it takes to become a top athlete. Both got affected in a similar way and began to reach for their dream. J-O and Jörgen received higher social recognition from the media as they achieved higher results, but this was not a source for their motivational drive. Everything circled around winning titles for both. However, Jörgen's desire to win international titles came at the age of 14 after winning the EC 1980 for youth, whereas J-O's dream began at the age of 16 when he reached the final at EC 1982 for seniors.

Both athletes became professional players during mastery stage – first in Sweden then in Germany before age 20. As they achieved higher levels of performances, the social recognition and their financial status also increased. But neither Jörgen nor J-O considered these factors as motivational forces. However, as J-O put it: "...it was cool though that the club wanted me for no matter price". Jörgen emphasized the cultural differences in Germany where winning was essential in order to gain respect and self-worth, which was an emotional challenge. It is slightly surprising that J-O did not mention anything about the culture differences. This could lead to the assumption that they may have perceived and interpreted the environment differently, which may lead to the assumption that Jörgen was more vulnerable than J-O. Both participants seemed to profit from experiencing culture differences which further expanded their knowledge of optimal functioning and competence.

The people and the media have several times questioned their ability to perform at their highest levels, particularly right before big events such as WC, EC and Olympics. Both have had exceptionally long careers that typically characterize a dynamical nature – they both faced periods of adversity and times of serious doubts, especially Jörgen. And they coped remarkably well particularly times before huge events. Both Jörgen and J-O found doubts from the environment highly stimulating and motivating as they many times surpassed the expectations of experts. This is particularly evident after setbacks, such as Jörgen's neck injury caused by a car accident in 1994 and a longer break in 2005, and J-O's foot injury out in public in 2002. Underestimations from the public were mainly based on the idea that they were too old for this sport that requires speed and coordination. As a matter of fact, table tennis is an interactive sport that requires the foremost anticipation of the opponent's moves, qualities which are rather hard to form an opinion of. Nevertheless, both got highly motivated when people questioned their ability and they managed to come back to their international level several times during their career.

Both athletes perceived their parents as interested, supportive, and encouraging. Although J-O's parents (and grandparents) showed high interest and were highly autonomous, they emphasized work-ethical aspects of his sport involvement, which became more important after he quit education. Jörgen received a lot of support from home but he perceived his father as strict and exacting during childhood which may have had an impact on his self-esteem and possibly on his athletic identity development.

Even though Jörgen and J-O have reached successes early in their career it is rather important to point out their humbleness and the constant curiosity to learn from others, and getting updated with new knowledge was essential for their competence development and maintenance of their motivational level.

## Cases in relation to theoretical frameworks

According to the self-determination theory, intrinsically motivated behaviors are actions which are self-directed and are performed for the fun, enjoyment, challenge, and satisfaction that are embedded within the activity. Extrinsic motivation is concerned with regulations that are characterized by individual goals directed by separable consequences (e.g., external rewards or punishments) (Deci & Ryan, 1985). Both types of motivation were evident in both participants during initiation, development, and perfection stages; their passion for the game indicates inherent joy for the activity. Intrinsic motives are particularly evident at J-O, who constantly experimented with new ideas and tricks on practice sessions, and more importantly, in competitive environments. It could be argued that this self-explorative behavior construed building blocks for J-O's endless creativity he adopted and developed throughout his career. Although, Jörgen showed high levels of intrinsic motivation during childhood as well, he seemed to be driven by extrinsic motives too, such as becoming a table tennis star. This kind of behaviors correspond with integrated regulation, which means that behaviors have been evaluated and brought into congruence with one's other values and needs. Integrated regulation is closely related to intrinsic motivation; it is however considered as extrinsic because actions are performed to achieve a personal goal rather than inherent pleasure of the activity (Deci & Ryan, 2000). This regulation characterize both athletes throughout their career, Jörgen displayed this type of motivation relatively early, which may have facilitated early specialization in sport.

Both J-O and Jörgen displayed high perceptions of ability and experienced progress early. Within the tenets of achievement goal theory it can be argued that both participants' high perceptions of competence were based on both self-referenced and normative-referenced criteria. These illustrate high task as well as high ego orientations because their activities were integrated in competitive environments (deliberate practices and competitions).

The concept of winning became more important when they joined the national team where emphases were on loads of deliberate practice and competing. Although due to high perceived ability both got stimulated by the competitive environment, it may be argued that in addition to high intrinsic motives, extrinsic reasons for participation increased significantly (identified regulation and integrated regulation). Outperforming others are often a main criteria in order to keep membership within a national team. It is reasonable to state that high task involvements are more likely to exist during practices; however, high ego involvement is more common on competitions when athletes seek to define competence in relation to others.

Observational learning was apparent at both participants which become more evident after a visit to China, where they recognized what it takes to become a high level performer. Roberts et al. (2007) argued that a key distinction between task and ego involved individuals is the way they define and assess competence. Task orientation seems to be fundamental when one defines competence which in turn provides task-specific information whether one is capable or not to reach a certain level. But it can be argued that ego orientation is essential in order to perceive whether one's task related competence is comparable with others. Both participants valued continuous learning as essential tools for personal development which further demonstrates a intrinsic interest to explore and learn.

Winning titles have been the main motivational drive all along for both participants. Winning and achieving trophies correspond with high extrinsic reasons for participation (identified and integrated regulations) as well as high ego involvement. However, J-O

emphasized that winning was not always the only source that made him feel successful. Developing his game was crucially important in order to win titles which clearly demonstrate high task as well as high ego involvement. He could accept losses when he was well prepared. Efficient and individual oriented preparations can be equaled with senses of control which most likely is a consequence of task absorption.

One of the most interesting findings in this study was how elite athletes' motivational forces get activated when the social environment questioned their ability. Duda (2001) has often proposed a view that individuals high in ego and task involvement, whose normative competence has been challenged, have always had the ability to default to their strong sense of self-referencing. Findings in this study show support for this assumption. Furthermore, it is reasonable to argue that ego involvement seems fundamental in order to reach high levels of performance, but only when individuals have a strong task-related belief to their ability. These findings also showed that the media and the environment that surrounded the participants may play a major role, and indicate a need of recognition and acceptance.

Both social recognition and monetary rewards can either increase or decrease the motivational level of athletes when these have both informational and controlling aspects, depending on how these are subjectively interpreted. If the media is informative in nature and acknowledges athletes' accomplishments, may facilitate competence. However, if the media is more controlling, which can be interpreted as threatening on both competence and self-esteem, may motivate athletes to defend their position and athletic identity. Feeling threatened (to the right degree) combined with high perceptions of task related competence and self-determined types of motivation may in fact be facilitative for elite athletes for optimal development.

The tenets of the SDT propose that three psychological needs, namely competence, autonomy and relatedness are fundamental for enhancement and maintenance of intrinsic motivation and psychological well-being (Deci & Ryan, 2000). The stories in the current study indicated that both participants' psychological basic needs were highly satisfied; both had a strong belief to their ability and were highly competitive all along. They both were surrounded by autonomy-supportive environments (e.g., parents and coaches), and particularly J-O was highly autonomous - he chose his own path and carried out tasks in his own way all along. Moreover, both felt related to coaches and players in the environment; Jörgen felt strongly related to the sport milieu, whereas J-O had a close relationship to his analytic and highly supportive brother all the way. In addition to that they were highly competent both had a strong desire to belong to the top layer of the athletic hierarchy. Participants' highly satisfied psychological needs may explain their surprisingly long and successful athletic careers. These may explain why they have been successful over such a long time.

# Cases in relation to previous research

The result of the current study show similar results as Mallett and Hanrahan (2004) obtained. They found that elite athletes have multiple motives and multiple goals for participation such as excitement, enjoyment and love for competing, and feelings of relatedness with elite athletes. Furthermore, athletes showed less self-determined motives for participation, such as money and social recognition. Although, the results from the current study show support for these findings, money and monetary rewards have never been a major motivational force for both participants.

Results also indicate that participants possessed multiple motivations, in particular self-determined forms of motivation, which support the findings of Forzoni & Karageorghis (2001), who found that participation in competitive sports does not undermine intrinsic motivation, but more interestingly may facilitate self-determined motivation. External

rewards can provide information about competence and also have a controlling influence on behavior. However, it may be argued that perception of competence is a strong mediating factor influencing self-determined motivation. It is suggested that elite athletes perceive external rewards as positively influencing their perception of competence, which in turn enhances their self-determined motivation.

Participants in this study demonstrated high task and high ego involvements that seem essential to continuously reach optimal levels performance in competitive sport, which correspond with previous studies with competitive athletes from different sports on various levels (Duda, 2001). However, task involvement is more crucial for long-term participation which characterizes the participants in this study. These findings further support the results obtained by Sarrazin et al. (1996) which showed that task involvement is positively related to the belief that one's level of physical ability is changeable and malleable.

Both J-O and Jörgen were involved in different sports in a playful environment which gradually changed as they specialized in table tennis. Moreover, participants were involved in stimulating environments where coaches guided their sport specific development. These results support the findings of Bloom et al. (1985). However, participants started their sport specialization rather early and became highly successful, which partially support the findings of Carlson (1988). It could be argued that several factors, such as sport diversification, high autonomous types of motivations as well as a highly supportive environment from significant others may be facilitative for early specialization. More importantly, these should be individually suited based on individual prerequisites.

# Methodological reflection

An in-depth narrative design for this study was chosen in order to get a deeper insight into how high level elite athletes perceive the dynamics of their motivation to remain successful over time. Although, highly successful participants, they are still two individuals who may not be representative for a larger population. Investigating a larger elite population with both quantitative, and especially with qualitative designs, may give us a deeper understanding for the dynamics of the motivational process. It may be valuable for coaches, parents and sport psychology practitioners to see how elite athletes perceive success and what criteria they use to feel successful in different stages of their career. Furthermore, long term interventions where researchers investigate what factors motivate elite athletes to maintain high levels of performance over time may give us effective tools to promote athletic development and personal satisfaction.

The interviews did provide some interesting reflections, however, it have also highlighted that human behaviors are dynamic and complicated, and researchers cannot create a complete picture of thoughts, feelings and behaviors based on theoretical models of motivation. This is perhaps one of the strengths of the narrative approach which investigate human experiences on a deeper level. Although, the interviews were satisfactory and seemed to stimulate participants to tell and relive their past experiences, the interviews could have been carried out in a quieter environment in order to eliminate potential disturbance. The interviews were carried out in public (a hotel lobby and a café) which to some degree may have prevented participants' responses due to social disturbance (e.g., participants being recognized). However, giving participants the opportunity to pick places where they feel comfortable is central for a good interview.

In order to gain mutual respect and credibility as a researcher, the interview material was sent to both participants. The full text of the results and conclusion was sent to participants before publication. This is particularly important when they gave permission to use their real names in the study.

Interviews were carried out in Swedish and the working transcripts as well as the

participants' quotations were translated into English. Although the author speaks both languages fluently, this process may lose some of the essence of their stories which in turn could affect the results.

One obvious limitation of the study is related to the retrospective nature of the study; the stories derived from the participants' long-term memory which may, raise questions regarding reliability and validity. Despite advantages of the narrative methodology that help respondents to structure and create meaning in their stories, it may however be essential to facilitate the encoding process from the long-term memory by watching sequences of videotapes that highlight important phases in their career (e.g., what can you tell me about the time right before this specific game?). Thus, perceptions of the athletes' past may not completely reflect the true nature of reality that occurred several years ago (e.g., people tend to perceive past experiences as more positive than they actually were) that may have caused a bias.

In order to get a deeper insight into participants' stories, additional narrative analysis could be done based on the Narrative Oriented Inquiry model. For example, a categorical-form and categorical-content analysis may provide with more specific data regarding personal experiences and meanings.

The current study was mainly based on self-determination theory and the achievement goal theory. However, in order to provide a deeper understanding of the motivational process, the hierarchical model of intrinsic and extrinsic motivation (HMIEM; Vallerand, 1997) might have been useful tool when studying relationships between the determinants and consequences of intrinsic motivation, extrinsic motivation, and amotivation at the global, contextual, and situational levels.

The researcher has been a table tennis athlete on an international level during a time when both J-O and Jörgen were highly influential. This background information (e.g., knowledge about the competitive culture) may have increased the quality of the paper, but at the same time it could have caused a bias during the analysis (e.g., interpretation of the stories). However, it is reasonable to argue that the interpretation of the results may reflect a rather objective nature of the reflections caused by increased psychological knowledge throughout the years after the investigator's retirement.

## **Applications**

Understanding what elite athletes go through and what factors they use that enhance their levels and quality of motivation, may help coaches, parents, and psychologists to create appropriate environments that facilitate athletes' inherent potential and their optimal personal development. One important application of this study is that elite athletes may be driven by personal goals (e.g., winning Olympics). Coaches and practitioners working with elite athletes should be aware of that various types of motivation may exist and those factors that influence the motivation. Social recognition and monetary rewards may provide them with information about their competence more than controlling their behavior.

Another application of the study is that high ego orientation may be a desirable orientation for elite athletes, high task orientation is strongly recommended to develop high perceptions of competence which is fundamental to remain successful in the long-term. In addition, fostering autonomy supported environment with emphasis on social support and encouragement are central, especially in the initiation phase and during adversities. It is of great importance that coaches encourage participants to explore their boundaries of creativity, to set self-set goals with main emphasis on task involvement and intrinsic motivation, particularly in competitive environment. Promoting autonomy and self-determined types of motivation may enhance individuals' sense of self, the will to explore and learn in order to facilitate personal development, particularly in competitive settings.

### Future directions

In order to gain deeper knowledge in the motivational process it is of great importance to design long-termed quantitative and qualitative studies in order to understand the dynamical nature of motivation among elite athletes. Although, quantitative investigations do increase the knowledge, it may not capture deeper underlying perceptions of motives associated with competitive participation. Furthermore, long-term quantitative and qualitative interventions may help coaches, athletes, parents and psychology counselors to increase athletes' quality of sport participation that may facilitate health benefits.

Future research on the motivational process may benefit from including several motivational theories (e.g., AGT, SDT, HMIEM) to understand the motivational dynamics in a developmental perspective. Moreover, investigating athletes' perceptions of the self and identity by including social psychology theories, may further extend the knowledge about the motivational process of elite athletes. Furthermore, future research may benefit from investigating participants' significant others (e.g., siblings, parents, coaches) that may additionally explain the motivational process in competitive domains.

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## List of appendixes

Appendix 1: Developmental model of transition faced by athletes (Wylleman & Lavallee, 2004)

Appendix 2: Narrative Oriented Inquiry model (Hiles & Čermák, 2008)

Appendix 3: Working transcript (participant 1)

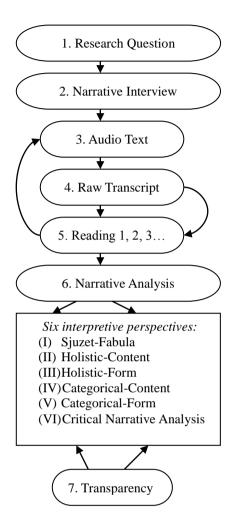
Appendix 4: Working transcript (participant 2)

# Appendix 1

# Developmental model of transitions faced by athletes (Wylleman & Lavallee, 2004)

Age	10		15	2	0 25		30	35
Athletic Level	Initiation		Development		Mastery		Discontinuation	
Psychological Level	Childhood	1	Adolescence		Adulthood			
Psychosocial Level	Parents Siblings Peers		Peers Coach Parents		Partner Coach		Family (Coach)	
Academic Vocational Level	Primary education		Secondary education		Higher education	Vocational training Professional occupation		

## Narrative Oriented Inquiry Model (Miles & Čermak, 2008)



## Jan-Ove Waldner Working transcript

I started to play table tennis at the age of 5 together with my brother who was 2 years older. The start was a kind of coincidence as we found a table in the bike-room down in the basement. We set up a table at our grandparents too on the countryside and played a lot. I sensed that I had talent and we joined the club Spårvägen in Stockholm. We played a lot of other sports in parallel like soccer every day, and tennis. Finally I chose table tennis due to easy access to it.

I experienced quick progress all the time. I was always the youngest and felt I was as good as those at my brother's age and even better. I never experienced any 'big split' – perhaps when I lost to Jörgen (my team-mate) at the EC for youth. I felt also lucky because of the material/equipment revolution that time (rubber that gave more spin and feeling). Everyone saw me as maybe the biggest talent of all times and rumors went around in the country in a time when table tennis was a popular sport.

Success didn't mean much to me and at the beginning I just played for fun. My matches were characterized by much fun and I often tested new shots (playing with touch) and played far from the table with high-balled rallies. Even though I started to win titles I didn't take table tennis seriously until the age of 11, 12. I participated on a lot of tournaments and competed in different categories. Sometimes too much fun (too long matches in too many categories) caused delays on competitions and organizers told me to win quicker in order to manage the time schedule.

I joined that national league at a very early age of 12. I was short and could barely climb over the barriers. Success for me meant a lot when I reached the age of 14, 15. The play became more serious after I quit school. Even though my parents wanted me to continue with education I didn't find it interesting then, everything was up to me though. Already at the age of 14 I went to China for a longer stay and missed a lot of school. It became serious when I quit school because I made a decision – I wanted to play table tennis and my parents supported my choice.

Expectations from parents did not change anything as I achieved higher results. My father was happy as long as I behaved appropriately - he was happy if I reached quarterfinals, he was always so positive. My father, originally a farmer and a hard worker, worked as a printer at a national newspaper factory. My parents were competitive athletes too – they played bowling in the top series.

I am so young and everything rolling on. At the age of 16 I reached the final at the EC for seniors. Everything is rolling on and already at the age of 15 I got to practice with the elite team who practiced like madmen - I practiced long and tough sessions which I found exciting and really fun. After half year I defeated them on the national championships which earned me some respect. I felt lucky with great training opportunities at an early age. My brother was always pushy and very supportive which suited me perfectly.

I saw myself as a talented player with good play- and ball-sense - those who have that 'little extra' get often more attention in the media compared to those who are only warriors. There was a lot of talk about that I was a talent. Lindh, a national player who won a lot down in

Europe and then I came with a different ball-touch that I had already then.

I started to dream about success at the age of 16 when I reached the final at EC for seniors as the first big tournament. Right after that the goal was to win WC, EC and Olympics. I reached the final unranked by defeating the top-seeded players like Klampár, Douglas, Bengtsson, and Kalinic who dominated Europe then. It was an enormous feeling and it felt like winning the whole EC.

Everything for me was about winning already then. That's what has driven me and that gave me the self-confidence to feel successful. I won so often and several classes on tournaments at early age and that is what came out of it. Becoming second wasn't satisfying but I was always the youngest and yet on top. Even on practices I always challenged myself by handicapsystem (e.g., starting at 0-8) in order to increase my motivational level.

It took some time before I actually won something big as I turned to senior. Still, winning is the driving force but the most important thing for me as a senior player was to develop my game – having a few details to work hard on in order to win WC and Olympics. I knew where I needed to improve, that caused losses in the past, which motivates me a lot. I was developing my own game by watching other players and trying to become as good as the best ones at their best shot.

I reached the final 1987 in New Delhi where the whole team got a stomach disease. I couldn't watch the team final due to high fever. The radio announced that everyone is knocked out in the single event only I was left who was still sick. They wanted me to leave too but I refused. I didn't want to leave — I used such a long time to prepare for this. This in an example of that I never gave up even though allergic reactions and low blood count.

I started to earn some money from 1985. A club in Saarbrücken in Germany wanted me for no matter price. Money has never been a driving force to me but it was cool that the German club wanted me so badly. The club wanted me already the year before when a lot of money was involved but I chose not to move because I was too young and I needed one more year to be ready. I played three years in Germany later on and eight years in Sweden thereafter. I definitely didn't play where the money was the most. I played eight years in Kalmar because I wanted to achieve good results on the national team – my goals were always to win as much as I possibly could – WC, EC, and Olympics. Money was never important to me.

I won the Olympics 1992 as the only gold medal Sweden got. The achievement was enormous and people celebrated at the square in Stockholm and the days thereafter were incredible. The motivation after I reached the top was to stay at the top. Nothing else motivated me. I had to fight for the EC title which seemed to take a long time to get it. People were talking – you cannot win the EC, this and that. I could always find something that motivated me – what other people said and wrote could motivate me even more which I always thought was a good thing.

The victory at the WC 1997, as probably one of the biggest achievements of all time where I did not lose a single set during the single events, the media underestimated me and stated that he was too old before start. What I did was he changed my training methods and found out which matches were the most important ones, trying to be at my best at the end of the team events, before the singles start (he got crossed by Samsonov in the team event). It was a motivational stuff for me. I got psyched up and trained even harder. The more negative there was in the newspapers the better it was for me. I got sulky and practiced like hell, went out

and ran like a madman and even though dead-tired, I could go out for an hour and just focus.

I never felt as good as I did on the training-camp in Italy with all the Europeans right before the Olympics 2004. Three of eleven leaders at the camp picked me as the winner. When playing against Samsonov (the best European then) I felt like he played in slow motion. I got a good draw at the Olympics and when I saw myself there I thought I was going to win. I didn't care much about if it was Ryu (the one who won) or Leung I was going to meet in the semifinal but afterwards it might have been better to meet Leung who was up 2-0, instead of a Korean who was as good as hell. But coming to the semifinal by defeating Ma Lin and Timo Boll was an achievement.

Winning wasn't always the only information that gave me self-confidence. I could accept losses when I practiced and prepared well to competitions. I didn't have a family and I could always fully concentrate on table tennis. It might have been easier for me compared to Jörgen who had some challenges with his family. I didn't have any 'negativity' on the way and I could always fully focus and talk table tennis with my brother. I was genuinely interested in the game and me and my brother watched a lot of videos and had many tactical discussions about top players. I was very good at identifying strengths and weaknesses of the opponents. For example, nobody dared to play two balls in the row out to Ma Lins forehand – I did that in order to crush him mentally at the start of the game during the Olympics 2004.

My brother has been very important to me and so were my parents. I had the best one could wish for. Whatever I did, as long as I did it in a good way my parents were happy. It is not that common nowadays. There is more push today. And I have never experienced push. When I got back from tournaments unsatisfied, my parents were always encouraging and supportive. They pushed me sometimes when it was club-practice and when I felt sick I could stay at home. My father never missed one single day at work as long as he lived, an upbringing that a work has to be done. My family taught me that if you have decided for one thing then you have to do it.

When we were young our parents drove us everywhere and our grandparents joined us. They knew all the players in Sweden and if grandpa missed any matches we played, we needed to call him to tell about the matches. Our father was a member of the board in Spårvägen and drove the bus to all the competition with the whole gang.

No coach has meant anything special to me. When I joined the national team I couldn't say if coaches meant more because I still practiced at his club mainly. I had many good coaches though when I was young. Some coaches went out in the media and said that they made me. Nobody can state that. I have been an independent person all along. I learned very much from watching other players such as Liu Guoliangs services, Klampars play close to table, Guo Guoyuas stop-blocks – I could always find strengths at everyone.

I had lots of different coaches when I was a kid like Winbrant in the beginning in Spårvägen when I moved at the age of 12. Johan Messa, the coach on my first training-camp was maybe important. They learned me different stuff in a way they thought was right but I cannot state that any coach has helped me in a special way, that one taught me to get better forehand or so. I was experimenting all the time. I learned enormously much when I first went to China at the age of 14.

I won a lot but I also suffered lots of heavy losses. One big loss was when I lost to Jörgen at EC for youth and then I lost many times by having big leads with fifteen match-balls, I had 2-

0 against Appelgren, and a lots of chances. It was tough because winning was my goal. But then I found out why I lost, discussed with my brother and made an honest inner search. I knew that the times when I was well prepared both mentally and physically I had a big advantage at the beginning of the game. I watched a lot of matches on competitions that sometimes resulted in less optimal preparations before my own matches on the same tournament.

My brother made a statistical check on all the Top 12 tournaments I played regarding sets won with only two point's difference. He found that I won 52%. I was much better than my opponents because often I won so easily, except Samsonov, but when it really counts I am highly confident.

Reflecting on the career I say that it has been an enjoyable trip - I could have achieved more but I cannot complain. With a more 'effective yield' I could have been achieved much more. But it was very good for me that I got knocked up every second to third year on the way up which has boosted my motivation a lot. I am thankful for all the heavy losses. I am thankful that I lost against Appelgren at my first EC final at the age of 16. Winning the EC that early might have caused another turn in my career (e.g., winning EC and Olympics later). But maybe it would have caused an ending earlier. The EC 1996 victory came rather late so one must always find motivation to strive. I think that there is always something to win like no one won Olympics twice for example.

I am considered to be the one who always gets the best out of his potential when it matters the most. I favor disadvantageous situations where people don't count on me (a kind of Swedish phenomenon) which puts me in a position to surprise. I needed to play a few finals though in order to feel confident. I won the WC final against Jörgen 1989 (who did not lose a single match the whole competition) – I won not because I was a better player but because I felt that Jörgen was a bit too stressed in the decisive set. I met Jörgen in the WC 1991 again where I lost even though I felt I was a better player. Jörgen might have been more motivated than me to win in 1991.

In order to become a good player it is essential to self-think and knowing yourself – you have to know what you need to develop and not completely rely on what coaches tell you (do this and do that). Many of the national team players I talk to do not recognize what they need to do to improve their game. It is not a common thing nowadays. Practice sessions should be individually suited and based on individual prerequisites (or conditions) in order to build effective playing systems. Additionally, talking tactical table tennis is really important in order to educate and develop players.

The thing that motivates me after I won all the biggest titles there is, is that there is always something to win (e.g., winning the national championships with the club Kalmar). Right after a victory I used to take a break but then suddenly I feel that I cannot slow down – I have to accelerate again in order to win with my home team.

## Jörgen Persson Working transcript

I started to play table tennis on a youth recreation center in Halmstad. I joined a table tennis club at the age of 7. But the real first contact with table tennis was at the age of 2 ½, 3 years in the kitchen. I reached successes early in school and district championships, and table tennis became central already at early age. Table tennis was a popular sport then with a famous national team with several legends like Bengtsson, Johansson among others. I wanted to be like them and reached for the stars. Stars like Björn Borg and Ingmar Stenmark came later. The interest for table tennis stars like Klampar, Jonyer, Gergely, Orlowsky was big and I watched Swedish Open which was a huge tournament.

After joining the club I started to practice more intense and competed almost every weekend. I played the national championships for youth at the age of 9 which is very early. Shortly after I joined the national team and participated on the EC for youth at the age of 13. Joining the national team included training camps with top junior players and got a good education. At the age of 15 I went to China for a month with the national team, a trip which gave me a great learning opportunity — to see what it takes to reach the top, to learn how to play against different playing styles, and hard work. I practiced 6 days a week and played more and more for the national team.

I became European champion for youth for first time at the age of 14 by defeating Waldner in the final. Early successes with the national team led to beliefs of future success and I started to dream about becoming European and world champion. Taking part on national team camps and a trip to China provided me with a lot of education: I saw what it takes to become a top player. I was open for new ideas and watched and learned from others – I felt I was not that far from the best. I sensed I was talented at an early age – although many are talented, one needs to take care of it.

I had a stubborn belief to my ability at early age and reaching success provided me even more belief in my capability and increased self-confidence. Winning has always been a driving force. Playing for fun was also driving me but winning gave me the biggest satisfaction. Winning became even more important when I joined the national team; a group which was characterized by competition in everything such as soccer, floor-ball or poker that I may have adopted. I have also learned that there are no short cuts – hard work is essential to reach success.

My parents have always been interested, helpful, supportive, and never pushed me. The people involved in the club were helping and supportive – driving to tournaments almost every weekend with the whole team which provided me with fellowship and positive feelings towards the club.

I got attention in the media at early age. This was cool but it wasn't a driving force for me. The time after the EC victory I became a professional player in Germany (at the age of 19) where several other Swedes played which was a huge step to come there. I got a good but tough education there by joining the top elite. I experienced cultural differences such as noisy spectators on away-matches and that the only thing that mattered was to win – I felt worthless when I lost. The Swedish security didn't exist and nobody comforted me during adversities, which I thought was a good thing as I learned to be tougher. Coming to Germany early in my

career was a great learning experience.

I started to earn more money as I reached higher performances but I am still driven by winning titles – that's what I am playing for. A pity that I wasn't interested in other things such as economics and investments to create a safer ground – but there was no driving force in it. The driving force was always to win titles like EC and WC as long as I can remember. One dream came true when I won EC in 1986 but then WC became the target which has driven me. Money has never been a concern when I was choosing sport at younger age. I tested a lot of different sports such as soccer and tennis but table tennis was the sport where the biggest talents were to be found. It could have been tennis but my dream was to become a table tennis player.

The environment that surrounded me didn't change that much as I progressed. I moved a lot which was quite normal when playing for a club abroad and representing a national team at the same time. My father was strict and pushy with high expectations already when I was 10, but I refused to cooperate with him and chose to be more independent. He was the only one who wanted to get involved more and more that way. We didn't have much contact since then. Personal problems do have a negative influence on me which is not visible on the result-statistics. Like in Gothenburg 1993, I had a lot of problems and was out of balance but I chose to play though. I went on and came back instead — I had some setbacks but I always came back which has been motivating me.

I have always had people I could trust such as coaches. I never thought too much about what other people were thinking. I am pretty much the same guy – I didn't change that much. And the environment, many people have been helpful – many people have been involved during all these years. I have also become more independent along the way and learned this - you have to go for it otherwise it's difficult to become a good player. I always loved this sport, although I had my coaches' support, I always tried to stand on my own feet with my own philosophy and own ideas which is essential in order to develop.

Coaches were important during my youth which has been a positive experience. As I progressed and achieved higher performances the better coaches I got – coaches with more experience who were national team players themselves in the past. But also the better one becomes the more the coaches' competence increases too.

During my youth coaches have been very supportive and helpful in every way. I had different coaches during this time. When I joined the national team my coaches were previous national team players like Bosse Persson, Kjell Johansson, Stellan Bengtsson which I considered were highly competent. Practicing in Falkenberg together with world class players like Bengtsson and Carlsson were very inspirational and educational. They practiced hard even if there was a big level difference between me and them – they made an effort in order to help me, a practice behavior I adopted and use even today during practice with younger players.

I won the EC 1986 at the age of 20. The WC 1987 didn't go so well except that we played the final in team events. China dominated completely that time and I remember that Sweden was the only country who took the fight against the Chinese. WC 1989 went in Germany which was a second home for many Swedes. We had high quality national camps in addition and we felt that this was our chance after being crushed three times in the row (83, 85, and 87). I felt that even if we lost big, we have learned something - we never gave up hope by being patient, working hard and the right way in order to develop the game and to become a more complete player. I felt a positive spirit in the whole group with purposeful training where everybody

pulled the strings into the same direction both on practices and competitions.

The WC 1989 was very tough because the only match I lost throughout the whole tournament was in the singles final in against my team-mate Waldner. It was tough because WC takes place every second year and it is difficult to reach the final – you have to take the chance when is there. I thought I will never get that chance again. Here too, I am strongly driven by winning titles which has been the motivational force all along. I took my chance at the WC 1991 by defeating Waldner in the singles final. I knew I had the power to win due to being in the final the two years before. It is such a satisfaction when you reach your goal to become a world champion. You have such self-confidence after that even in periods of adversity. I was truly satisfied by being both European and world champion before turning 25.

The years thereafter were followed by great adversities with less successful achievements such as Olympics 1992, WC 1993 which raised questions about finishing my career. I suffered a car accident in 1994 that caused a neck injury. I felt I lost my motivation to continue – I played without joy which I found troublesome. After the car injury break of 6 months I decided for a comeback. I reached the final at the EC 1996 which was satisfying.

Being famous and getting social recognition from the media has never been a driving force. I felt that the media focused much on when I am finally going to quit. I still had the instinct to reach the top even though I felt I lost a bit of it after the accident. When you have the driving force you want to continue and I know when I am no longer capable - I know myself and I decide when it is appropriate to quit.

Evidently, I earned more money as I reached higher performances. But this was not what motivated me – if this would have been the case then I would make an investment instead. Money has never been a driving force – winning was. Playing matches on practice sessions against national team members was like playing a final on a Pro Tour or EC, which was highly motivating too.

I thought that the Olympics in 2008 was the last one but I still miss an Olympic medal which strongly motivates me today. I am willing to give another try.

There have been a lot of changes the years after 2000. I have established a family. Then there have been a lot of changes in the regulations which one cannot underestimate – the ball-size increased, new service rules, racket-gluing rules, and the counting system have changed. I needed to make technical and tactical changes in my game in order to successfully adapt to these changes which required strength and creativity.

The media have several times underestimated my and Waldner's achievement capacity right before big events which I found motivating. We have been each other's conquerors over a long time and took benefits from it by motivating each other even though we are very different.

I never felt pushed by anyone but sometimes I need to take a fight right before I am about to get something done such as running or going to the gym. When I decide to do something I am doing it because I believe the goal is possible to reach by being just and not by trying to fool myself. I know what it requires to reach the top and what preparations need to be done, and that motivates me even though it is a challenge.

I can fully understand that sometimes the people and the media don't count on me which

often are based on results right before a big event. Nobody counted on me at the Olympics at 2008 which was truly motivating me. I am well aware of that when I am well prepared I can go all the way.

Reflecting on career as a whole regarding support from the environment I state that without parents you are no one. My parents have always shown interest and I never felt too much pressure. Halmstad BTK and people involved in the club meant a lot which was very motivating, Bosse Persson at the Table Tennis gymnasium was inspirational and a lots of good people who were involved. Bengtsson has been a good friend and meant a lot, and still today is very supportive and inspirational of whom I learned a lot. Glenn Östh was also a great coach with new ideas and of great influence.

Even today I appreciate the people that surround me in the club and in the national team. I have learned a lot, I know myself and my body, and I try to pick things and persons in my environment that makes me feel good about myself. We have always talked a lot about table tennis throughout the years – how to play and how develop the game as important subjects.

I cannot fully reflect on my career yet because I am still active. So I am not looking back because I am heading for Olympics 2012. I had six trials and if I will not reach my goal in London I will always feel a 'stick' that something is missing. But the day when I will sit down to summarize my career I hope I will be satisfied. Although I will always find things that I was less satisfied with.

I took a break in 2005 and went to Qatar to work as a coach due to lack of motivation as a player - but also because I needed an environment change, and to find new energy and motivation. So I took this chance and worked as a coach together with Bengtsson as assistance. I felt that he was still thinking as a player and after watching the WC 2006 I recognized that I am still capable to challenge the top elite. Right before the WC I was on camp in China with my players and I got real inspired by the energy of the youth and I felt 20 years younger.