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THE UPSIDE OF DOWNTIME: AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS ON RECOVERY EXPERIENCE DURING DISCRETIONARY TIME IN MEN'S PROFESSIONAL TENNIS TOUR

BY

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DISSERTATION

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ABSTRACT

Recovery, defined as the restoration process of physiological and psychological resources for functional readiness, is associated with individual's motivation and performance at workplace, and well-being (Demerouti, Bakker, Geurts, & Taris, 2009; Sonnentag, 2001; Sonnentag & Natter, 2004). Despite the implications for athletic performance, the socio-psychological aspects of recovery, particularly during discretionary time, has been neglected in kinesiology research. Drawing on the literature of recovery-stress balance (Kallus & Kellmann, 2000; Kellmann, 2002) and daily recovery from work-related stressors during non-work time (Sonnentag & Binnewies, 2013; Sonnentag & Kuhnel, 2016), this study examined the significance of recovery experience during discretionary time in the men's professional tennis tour. Interviews and personal conversations with former and current male athletes competed in the professional tennis tour were analyzed using interpretive phenomenological analysis (IPA) to understand the recovery experience during discretionary time and its underlying psychological pathways. Analysis of data discovered discretionary time activities associated with recovery from organizational stresses as well as its psychological mechanisms in the men's professional tennis tour.

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CHAPTER I

INTRODUCTION

> In fact, the separation between the scientists and non-scientists is much less bridgeable among the young than it was even thirty years ago. Thirty years ago, the cultures had long ceased to speak to each other: but at least they managed a kind of frozen smile across the gulf. Now the politeness has gone, and they just make faces (Snow, 1961, 9)

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The rationale behind conducting this study hinges on my personal experiences with Hyung-Taik Lee who competed in the Association of Tennis Professionals World Tour (ATP World Tour), the highest level of professional tennis circuit, for 14 years, and more recently, with Hyeon Chung who was the 2015 ATP World Tour Most Improved Player, inaugural singles champion of the 2017 ATP NextGen Finals in Milan, and men's singles semi-finalist at the 2018 Australian Open. I worked with Hyung-Taik and Hyeon as a tour manager and sport psychology consultant while both were competing in the ATP World Tour. Such experience, combined with my academic pursuit in sport and exercise psychology (SEP), kindled my interest in the psychological aspects of recovery and its relationship to athletic performance. Accordingly, how professional tennis players recover (or under-recover) from life stressors such as pressure to win, early elimination, travel, tight schedule, and physical and mental fatigue throughout the season was a question which I want to seek an answer. More specifically, it was of interest to examine recovery experience during discretionary time and its underlying psychological processes, and how it may influence athletic performance in men's professional tennis tour.

This study sought to provide sport psychology consultants, tennis players, and others working with professional tennis players such as coaches, strength and conditioning trainers, physiotherapists, agents, parents, and friends, a more nuanced understanding of the psychological aspects of recovery experience from work-related stress during discretionary time while competing in the highest level of professional tennis. From a research standpoint, this study was guided by the scholarships of recovery-stress balance (Kallus & Kellmann, 2000; Kellmann, 2002) and daily recovery from work-related stressors during non-work time (Demerouti, Bakker, Geurts, & Taris, 2009; Sonnentag & Binnewies, 2013; Sonnentag & Kuhnel, 2016). The former framework advocates the importance of recovery, defined as physiological, psychological, and social process for recuperation of personal resources, within the load-recovery principle of athletic training (Issurin, 2010; Kellmann & Kallus, 2001; Yakovlev, 1955). That is, training stress (i.e., physiological stimulus) should be balanced with subsequent recovery phase to prevent negative performance symptoms such as overtraining, underperformance, and burnout and to maintain and enhance athletic performance. The latter perspective, largely studied in industrial and organizational psychology (IOP), suggests the importance of individual's experience of recovery from work-related stressors during non-work time and its potential influence on job-performance and well-being (Fritz, Yankelevich, Zarubin, & Barger, 2010; Hahn & Dormann, 2013; Smit & Barber, 2016; Sonnentag, 2012; Sonnentag, Kuttler, & Fritz, 2010). My dissertation title was influenced by common English phrase "upside of downtime". This phrase is commonly found in books, articles, and research that represent the importance of discretionary time in enhancing human performance and quality of life.

Classic Conceptualization of Recovery in Kinesiology Research

The significance of recovery in athletic training is found in kinesiology research (Hitzschke, Holst, Ferrauti, Meyer, Pfeiffer, & Kellmann, 2016; Kellmann, 2010, Kellmann, Altfeld, & Mallett, 2016; Montgomery, Pyne, Hopkins, Dorman, Cook, & Minahan, 2008; Vaile, Halson, Gill, & Dawson, 2008). The classic view of the role of recovery was first conceptualized in the training effect theory and load-recovery principle (Issurin, 2010; Zatsiorsky, 1995; Zatsiorsky & Kraemer, 2006; Yakovlev, 1955). To illustrate, recovery intervals between loads of physical training inducing physiological stress correspond to the supercompensation phases where the increase in strength and functional capacity may occur. Such frameworks guided research and practice in developing effective training methods for athletes such as periodization (Bompa & Haff, 2009; Kiely, 2011; Turner, 2011). Although the importance of recovery in athletic training was conceptualized, the majority of research and practice in kinesiology mainly focused on biological mechanisms of physiological responses and adaptations to physical training (Chiu & Barnes, 2003; Plisk & Stone, 2003; Thomas & Busso, 2005).

Recovery during Discretionary Time

Contrasting from kinesiology, other areas of research such as IOP and leisure studies focused on the role of discretionary time within the recovery processes associated with human performance and well-being. For example, IOP literature based on work-life balance conceptualization implies that daily recovery during non-work time is significantly associated with job performance, work-related energy, and well-being (Demerouti, Bakker, Geurts, & Taris, 2009; Demerouti, Bakker, Sonnentag, & Fullagar, 2012; Sonnentag, 2012; Sonnentag & Fritz, 2015). Leisure time experience is linked to physiological and psychological health indicators as well. In a study of 1399 adults in the US (Pressman, Matthews, Cohen, Martire, Scheier, Baum, & Schulz, 2009), participating in enjoyable activities during leisure time was significantly related

to positive mental states, lower levels of clinical depression, and negative affect. Similarly, in a Japanese leisure activity study (Morita, Fukuda, Nagano, Hamajima, Yamamoto, Iwai, Nakashima, Ohira, & Shirakawa, 2007; Park, Tsunetsugu, Ishii, Furuhashi, Hirano, Kagawa, & Miyazaki, 2008), participants showed significantly lower levels of salivary cortisol concentration, perceived stress, pulse rate, and higher power of heart rate variability (HRV) after taking Shinrin-yoku (i.e., forest bathing and walking) as compared to spending time in a city area during leisure time.

A growing body of neuropsychological evidence also supports the significance of recovery during discretionary time by demonstrating the effects of mentally disconnecting from environmental stimuli on the recuperation of physical and psychological capacity (Immordino-Yang, Christodoulou, & Singh, 2012; Seeley et al., 2007). Recent neuroimaging research suggests that the activation of default mode (DM), characterized as a network of brain regions functioning when attentional focus to external stimuli is prohibited while awake, during downtime is significantly associated with the quality of subsequent mental and behavioral functioning (Northoff, Duncan, & Hayes, 2010; Spreng, Stevens, Chamberlain, Gilmore, & Schacter, 2010).

In kinesiology, the psychological and social aspects of recovery during discretionary time (i.e., non-training time) have been overlooked as the primary focus of recovery-performance research has been the investigation of the biological processes and outcomes of physical training. Although research and practice in SEP focused on developing social-cognitive strategies for stress management, little work directed to the role of recovery during discretionary time per se.

Janke and Wolffgramm (1995) were among the first kinesiology researchers to suggest the need for a multilevel approach to recovery in athletic performance studies. That is, it is important to embrace the physiological, psychological, and social aspects of recovery that could potentially prevent overtraining and negative performance outcomes in elite sporting environments (Gould, Greenleaf, Dieffenbach, Lauer, Chung, Peterson, & McCann, 1999; Kellmann, 2002; Lehmann, Foster, Gastmann, Keizer, & Steinacker, 1999). Similarly, Kellmann (2002) suggested a holistic approach to the investigation of recovery process in sport and exercise. That is, life factors outside the scope of training and competition may influence training effectiveness and performance, and therefore, athlete's discretionary time may contain useful information towards a better understanding of recovery process around loads of training sessions and competitions (Noakes, 1991). In short, comprehensive investigation of athlete's discretionary time may address the multifaceted nature of recovery and enhance our knowledge about the complex processes involved in the training-recovery-performance relationship.

Scholarly Significance and Purpose of Study

Despite conceivable implications for athletic performance and well-being, kinesiology researchers have neglected the significance of this emerging body of psychosocial and neural evidence of recovery, specifically during discretionary time. That is, individual's discretionary time experiences associated with recovery outcomes and its influence on athletic performance have been overlooked in kinesiology literature. Also, previous research argues that addressing the cultural and contextual specificity of different types of sport may further our understanding of the relationship between specific organizational stressors and athletic performance, and well-being (Hoedaya & Anshel, 2003; Kamphoff, Gill, Araki, & Hammond, 2010; Nicholls, Jones, Polman, & Borkoles, 2009; Nicholls, Levy, Grice, & Polman, 2009; Park, Tod, & Lavalllee

2012). Therefore, the purpose of this foundational study was threefold. First, to understand the organizational stresses specific to the context of the men's professional tennis tour. Second, to identify discretionary time activities associated with outcomes of recovery from the organizational stresses in the men's professional tennis tour. Third, to explore the underlying psychological processes of recovery experience during discretionary time in the men's professional tennis tour.

As mentioned above, this study was informed by my personal experiences with Hyung-Taik Lee, Yongil Yoon, and Hyeon Chung, as agent, tour manager, and sport psychology consultant, as well as in-depth interviews and personal conversations with other current and former players about their discretionary time experiences while competing in the professional tennis tour. Tracing the lived-experiences of recovery experience during discretionary time has guided the answer to the three main research questions of this study:

1) What is the significance of organizational stress in the men's professional tennis tour?
2) What are the activities during discretionary time and associated recovery outcomes relative to the organizational stresses in the men's professional tennis tour?
3) What are the psychological mechanisms of recovery experience during discretionary time in men's professional tennis tour?

Methods and theories commonly regarded as qualitative inquiry, physical cultural studies, and interpretive phenomenological analysis (IPA) were employed to capture and interpret the cultural aspects, lived-experiences, and individual-centered voices of discretionary time experiences in the men's professional tennis circuit. This approach seemed reasonable as, to date, individuals' recovery experiences during discretionary time and its psychological processes have

yet to be systematically examined in professional tennis research. Also, my professional experiences and connections in the ATP World Tour have been utilized as part of overcoming participant access issues in elite and professional sport studies, and therefore, contributing to conducting a more ecologically-valid and nuanced stress-recovery-performance research (Kellmann & Beckmann, 2003).

Organization of the Dissertation

This dissertation consists of 6 chapters. In chapter 2, the structure of the ATP World Tour is summarized to describe the context of men's professional tennis circuit as a workplace. In chapter 3, a review of literature relevant to the purpose of study including a summary of stress management literature in SEP, definition, conceptualization, outcomes, as well as psychological mechanism of recovery (i.e., psychological detachment) studied in IOP, and an overview of organizational stress in men's professional tennis tour, is provided. In chapter 4, the details of enquiry in this study including positionality, the use of IPA in SEP, epistemological and ontological orientation, and cultural analysis are described. In chapter 5, the ways in which significant dialogue about recovery experience from work-related stress during discretionary time and its psychological processes in men's professional tennis tour as exemplified through the lived-experiences of current and former athletes in the ATP Tour are illustrated. Lastly, in chapter 6, I provide summary of original findings from previous chapters, limitations of the study, and suggestions for future research in professional tennis. Also, I briefly comment about my academic journey of conducting this study and future plans as a researcher in the field of kinesiology.

CHAPTER II

ASSOCIATION OF TENNIS PROFESSIONALS WORLD TOUR – THE MEN'S PROFESSIONAL TENNIS TOUR

In this chapter, I forward the idea that the ATP World Tour (ATP Tour) can be conceived as a workplace where athletes engage in high levels of competition in pursuit of performance excellence and financial achievement (Weinberg & Gould, 2010, p. 505). Background information about the structure and administration of the ATP Tour is provided. Also, information regarding tournament levels, calendar, entry, ranking system, prize money, as well as cost and logistics of competing in the ATP Tour is provided.

ATP World Tour

ATP Tour is the international men's professional tennis circuit organized and administered by the Association of Tennis Professionals (ATP). Regular calendar of the ATP Tour includes Grand Slam tournaments, ATP World Tour Masters 1000s, ATP World Tour 500 series, and ATP World Tour 250 series. According to ATP World Tour Media Guide (ATP, 2018), 66 tournaments are played in 64 different cities in 6 different continents for 46 weeks throughout the season.

Tournament Levels

Tournaments in the ATP Tour are categorized into five levels by total prize money and financial commitment; Grand Slam tournaments, ATP World Tour Masters1000s, ATP World Tour 500 series, and ATP World Tour 250 series. Grand Slam tournaments are the four biggest events (i.e., Australian Open, French Open, Wimbledon, and US Open) in the ATP World Tour

in terms of prize money and draw size, and ranking points. Numbers after ATP World Tour denote minimum total prize money for each ATP event (e.g., 250 denotes minimum total prize money of $250,000). ATP Tour calendar for 2018 season including total financial commitment including prize money, draw size, and length of tournament by tournament levels are provided (appendix A). ATP Challengers Tour serves as an entry level event with total prize money ranging from $50,000 to $125,000. Although ATP Challengers Tour is administered by ATP, it is not considered as part of ATP World Tour. Therefore, it was excluded from discussion in present study.

Tournament Calendar

In the ATP World Tour, group of tournaments in the same or close by regions are scheduled for four to eight consecutive weeks throughout the season. This scheduling helps to efficiently manage travel schedule for players, coaches, agents, and officials on the tour. The season begins with a month-long series in Asia (Doha, Qatar; Pune, India) and Oceania (Brisbane and Sydney, Australia; Auckland, New Zealand), and warps up with a two-week major tournament in Melbourne, Australia (Australian Open). In the month of February, indoor hardcourt tournaments take place in Europe (Montpellier and Marseille, France; Sofia, Bulgaria; Rotterdam, Netherlands) and North America (Queens, NY, USA). Clay court tournaments also take place in South and Central America (Quito, Ecuador; Buenos Aires, Argentina; Sao Paolo, Brazil), as well as some hardcourt events in Middle East (Dubai, United Arab Emirates), Americas (Acapulco, Mexico; Delray Beach, FL, USA). Two ATP 1000 Masters Series, each taking place for 10 days with a three-day break in between, are scheduled in Indian Wells, CA and Miami, FL in March. European clay court season (seven ATP 250, one ATP 500, and three ATP 1000 Masters in 11 cities and 9 different countries in Europe) starts in April and ends with

the second major tournament of the season, French Open (Paris, France), in end of May. Few additional clay court tournaments are scheduled after Roland Garros (French Open) reflecting the high popularity of red clay court in Europe (Bastad, Sweden; Umag, Croatia; Hamburg, Germany; Gstaad, Switzerland; Kitzbuhel, Austira). Then, the circuit continues in grass courts; s-Hertogenbosch (Netherlands), Stuttgart and Halle (Germany), London and Eastbourne (UK), Antalya (Turkey), Newport (USA), and the third major championship of the year, Wimbledon (UK).

The summer season is called North American Hard Court Season or Summer Swing, and features 6 tournaments (three ATP 250s, one ATP 500, and two ATP 1000 Masters) in Mexico (Los Cabos), Canada (alternate between Montreal and Toronto every year), and USA (Atlanta, GA; Washington DC, Winston-Salem, NC; Cincinnati, OH), plus the last major tournament of the season (US Open, Flushing Meadows, NY), The tour moves to the Asian region (Chengdu, Shenzhen, Beijing and Shanghai, China; Tokyo, Japan) in the months of September and October. Then, the season wraps up with European indoor series (St. Petersburg and Moscow, Russia; Metz and Paris, France; Antwerp, Netherlands, Stockholm, Sweden; Basel, Switzerland; Vienna, Austria; London, UK; Milan, Italy) which typically ends around mid-November.

Entry Process

ATP World Tour uses an online tournament entry system called ATP Playerzone. All transactions regarding tournament participation (e.g., enter, withdraw, petition, sanction, appeal, etc.) are made through the official website built exclusively for players on the ATP World Tour. Entry deadline for all levels of ATP World Tour events is Monday at noon, six weeks before the start date of the tournament. The entry process through ATP Playerzone complies with the ATP

Rulebook (ATP, 2018) which administrates all activities related to tournaments in ATP Tour such as marketing, branding, finance, personnel, facilities and tournament structures, competition, code, cases and decisions, appeals, and healthcare and medicine.

ATP World Tour Rankings

ATP World Tour Rankings use objective mathematical and merit-based methods to determine eligibility and qualification for tournament entry and seeding (Association for Tennis Professionals, 2016). ATP World Tour Rankings are calculated based on points earned from best 18 tournaments during the past 52 weeks. Higher ranking positions provide players both greater opportunity to play higher tier tournaments and more flexibility to choose tournaments of preference based on region, court surface, training schedule, and so on. Therefore, players often express the hardship about earning and defending (points earned from last year) as many points as possible every week. In addition, chasing for ranking points could motivate (or stress) players as rankings are often associated with financial bonus from sponsorship and endorsement contracts which is a significant source of income in the professional tennis tour.

Prize Money

Prize money earned from tournaments is a major source of income for players on the professional tennis tour. Prize money breakdowns are established based on tournament tier (by total financial commitment) and number of rounds reached. Prize money is paid directly though ATP to each player's bank account by the Wednesday following the conclusion of tournament. Players have choice of deducting costs during the tournament stay such as hotel, laundry, stringing, and ATP membership and tournament fee (if applicable). Also, prize money is subject to local tax laws ranging from zero to forty percent tax withheld that affect net money received

each week. This, sometimes, influence player's decision of country of residence as well as choice of tournament entries for maximizing net pay of prize money.

CHAPTER III

REVIEW OF LITERATURE

In this chapter, literature relevant to the research questions of this study is reviewed. This literature review begins with an overview of stress and stress management literature in sport and exercise psychology (SEP). Then industrial and organizational psychology (IOP) literature on the effects of recovery from work-related stress during non-work time (i.e., discretionary time) on job-related behavior and well-being is reviewed. In addition, a brief overview of psychological detachment as one of psychological mechanisms for recovery experience during discretionary time is provided. Lastly, based on the conceptualization of organizational stress used in IOP, common stresses athletes experience in the ATP Tour are identified by reviewing the structure of the men's professional tennis tour, personal anecdotes, and empirical evidence.

Stress Management Research in SEP

Stress is defined as an ongoing transaction between an individual and the environment to overcome situational demands that exceed available resources (Fletcher, Hanton, & Mellalieu, 2006). Research on the relationship between stress and athletic performance stems from the early studies on anxiety and performance such as Drive Theory and Inverted-U Theory. The Drive Theory explains the link between increased arousal and habit or dominant response performance (Hull, 1943; Taylor, 1956), and the Inverted-U Theory indicates that excessive levels of arousal may hamper athletic performance (Martens & Landers, 1970; Sonstroem & Bernardo, 1982). Although these early works addressed the association between arousal and performance, individual differences in cognitively appraising and adapting to stressful situations were not taken in to account.

SEP research adopted cognitive stress models to overcome the limitations of the classic anxiety-performance perspective. For example, the Transactional Model of Stress and Coping (Larzarus, 1966) is a widely applied framework for understanding how stress is processed and managed within the interaction between personal and environmental resources. Central feature of this framework is an appraisal by personal agency to determine whether the adversity or stressor encountered is a threat to maintaining normal functioning. Primary appraisal occurs in the presence of an imbalance between personal and environmental resources and situational demands, and creates perceptions about the present event as stressful, positive, controllable, challenging, or irrelevant (Lazarus & Folkman, 1984). Then, based on available adaptation resources such as personality, previous experience of coping, intra and interpersonal resources, a secondary appraisal may occur. During secondary appraisal, an individual determines what actions can be made to alleviate stress and related symptoms. In addition, this model emphasizes that stress appraisals may fluctuate as result of dynamic change in personal and environmental resources.

Stress Management Model for Sport (Smith, 1980) is a conceptual model that assisted wide range of stress management research in SEP. In this model, a concept of integrative coping response is proposed to provide theoretical framework for examining both cognitive and behavioral strategies of stress management. Individual appraisal is the key within in the stress response which has physiological, psychological, and behavioral correlates and consequences. Also, stress appraisal is affected by coping resources in both personal and environmental levels. This stipulates that stress response may be better managed by intervening stress appraisal which is influenced by personal and environmental resources.

Stress models encompassing cognitive aspects of stress appraisal not only expanded the knowledge about the processes around stress, but also allowed scientists to study and develop effective stress management strategies in sport and exercise context. This is particularly important in elite sport given that management of stress is critically linked to achieving performance excellence (Scorniaenchi & Feltz, 2010), compromised performance (Lazarus, 2000), physical and mental health (Nicholls, Backhouse, Polman, & McKenna, 2009), and increased risk of athletic injury (Perna, Antoni, Baum, Gordon, & Schneiderman, 2003; Smith, Ptacek, & Smoll, 1992).

In summary, cognitive (i.e., stress appraisal) and behavioral (i.e., coping) dimensions of stress and stress management guided the advancement of SEP research and practice in the maintenance and enhancement of athletic performance and well-being. Further investigation of personal and environmental resources may broaden our knowledge about the cognitive and behavioral aspects of the stress-performance relationship. Recovery from work-related stress during discretionary time, mainly studied in IOP may be a useful framework to apply in stress-performance research in kinesiology. This concept may assist to explain how athletes restore personal resources during discretionary time and maximize performance readiness. In addition, this approach may be particularly useful for the research in professional and elite sport where athletes are exposed to high degrees of organizational stress in pursuit of performance excellence, fame and reputation, and financial achievement (Weinberg & Gould, 2010, p. 505). In the following section, empirical evidence from IOP research pertinent to daily recovery from organizational stress during discretionary time and its influence on job-related behavior, motivation, and psychological well-being is reviewed. Also, based on anecdotes and empirical evidence, common organizational stresses in the men's professional tennis tour are summarized.

Organizational Stress

Organizational stress is defined as the discrepancy between personal resources and environmental demands related to work (Shirom, 1982). Deeming from the classic conceptualization of stress (Lazarus, 1966), individual's cognitive appraisal of the circumstances associated with work environment is the central tenant of the organizational stress process (Woodman & Hardy, 2001). Organizational stress has been studied in many professional settings including business (Cangemi & Khan, 1997; Fried, Tieges, Naughton, & Ashforth, 1996; Seegers & van Elderen, 1996; Singh, 1998), medicine (Flett, Biggs, & Alpass, 1995; Florio, Donnelly, & Zevon, 1998), military (Rogers, Li, & Shani, 1987), and education (Cox, Boot, Cox, & Harrison, 1988; Mazur & Lynch, 1989). Research findings suggest that organizational stress is significantly associated with multiple health outcomes such as sleep quality and disturbance (Cropley, Dijk, & Stanley, 2006; Nylen, Melin, & Laflamme, 2007), levels of stress hormones (Sonnentag & Fritz, 2006; Sonnentag & Geurts, 2009), and risk of cardiovascular disease (Glynn, Christenfeld, & Gerin, 2002; Pravettoni, Cropley, Leotta, & Bagnara, 2007). In addition, research indicates that recovery from work-related stress is significantly related to both satisfaction and performance at work (Demerouti, Bakker, Sonnentag, & Fullagar, 2012; Hendrix, Ovalle, & Troxler, 1985; Jamal, 1985; Kemery, Mossholder, & Bedeian, 1987; Rabinowitz & Stumpf, 1987; Sonnentag, 2012; Sonnentag & Fritz, 2015).

Conceptualization of Recovery in IOP

In effort to address how individuals recuperate physiological and psychological resources compromised by the negative consequences associated with increased job demands and subsequent organizational stress in modern work environment, IOP research has examined how

recovery from work-related stress, particularly during discretionary time, may potentially contribute to the maintenance and enhancement of job performance and psychological well-being (Bakker, 2009; Bakker & Demerouti, 2007; Demerouti & Cropanzano, 2010). Majority of studies examined recovery in a daily basis given the fact that adequate recovery may occur during post-work hours in workdays as well as weekends (Geurts & Sonnentag, 2006; Sonnentag, 2003). This approach seems plausible as the benefits of long-term recovery activities such as vacation diminish rapidly that symptoms of burnout and subjective well-being return to baseline shortly after returning to work (De Bloom, Kompier, Geurts, de Weerth, Taris, & Sonnentag, 2009; Sonnentag, 2003; Westman & Etzion, 2001).

In IOP literature, recovery is often defined as the recuperation process of individual's physiological and psychological resources to reinstate performance readiness (Demerouti, Bakker, Geurts, & Taris, 2009; Sonnentag & Natter, 2004). It is commonly addressed in the literature that the nature of recovery is characterized by two core concepts: restoration from negative stress symptoms and absence of the stressor (Sonnentag & Geurts, 2009). One common method for measuring levels of recovery is by using series of questionnaires asking about overall mood and readiness before starting work-related tasks (Sonnentag, 2001). This method has effectively captured recovery from work-related stress and associated outcomes such as job performance and well-being, although, it does not account for specific activities associated with recovery, and it is not free from recall bias (Demerouti, Bakker, Geurts, & Taris, 2009; Sonnentag, 2001).

Sonnentag and colleagues (Sonnentag, 2001; Sonnentag & Natter, 2004; Sonnentag & Fritz, 2007) operationalized the term recovery experience, defined as individual's strategies and activities associated with perceived recovery outcomes, to capture specific (rather than general)

cognitive and behavioral aspects of recovery process and minimize recall error. Typically, recovery experience has been examined in IOP research using diary study method. This approach captured recovery experience by analyzing daily records of off-job activities and recovery indicators, typically collected for 3 to 5 consecutive days, and provided ample information regarding individual's different approaches and activities that may enhance (or impede) recovery process during discretionary time.

In the same respect of focusing on individual's leisure-time activities linked to recovery outcomes (i.e., recovery experience), Cropley and Millward (2009) conducted a qualitative inquiry to examine the differences in recovery experience between workers who find difficulty detaching from work during discretionary time (i.e., high ruminators) and workers who find ease detaching from work during discretionary time (e.g., low ruminators). Eight participants (M_{age}=31.625) identified as either high ruminators or low ruminators based on the Work-Related Rumination Scale (WRSS) (Cropley & Millward Purvis, 2003) were invited for semi-structured interviews. A process-oriented qualitative approach guided by Interpretative Phenomenological Analysis (IPA) (Smith, 2004; Smith, Flowers, & Larkin, 2009) technique was adopted to investigate how individuals make sense of their recovery experiences as participants articulate about their own discretionary time activities. Analysis of the interview data indicated that participants who find ease distancing themselves from work exhibited higher degree of autonomy and cognitive control during working hours, intrinsic motivation, clear work-home boundaries, social engagement, fulfillment and enjoyment of leisure activities, and work-family harmony, as compared to their high-ruminating counterparts.

Outcomes of Recovery Experience: Job Performance, Motivation, and Well-being

As part of the effort to examine the significance of recovery experience from work-related stress during discretionary time, multiple studies have investigated the outcomes of recovery associated with discretionary time activities in different work settings (Demerouti, Bakker, Geurts, & Taris, 2009). In general, outcomes of recovery were measured by comparing different degrees of recovery indicators (e.g., sleep quality, feelings of recovery, feelings of refreshment, motivation for job, etc.) at multiple timepoints around work and non-work time using a dairy study design. Although recovery indicators used significantly vary across study contexts, evidence suggests that majority of recovery outcomes fall into three major categories; well-being, motivation, and job performance (Binnewies, Sonnentag, & Mojza, 2009; Sonnentag 2001 & 2003; Sonnentag & Bayer, 2005; Sonnentag, Binnewies, & Mojza, 2008; Sonnentag & Natter, 2004).

Sonnentag (2001) conducted a diary study to examine how leisure activities influence individual's well-being. Participants were 100 full-time Dutch elementary, middle, and high school teachers (M_{age}=41.0, SD=9.8). A diary study method was employed to capture types of activities and the total time spent on these activities during post work hours for five consecutive workdays. Also, situational well-being for two different time points (i.e., post work and before going to bed) was measured. Results indicated that low-effort, social, and physical activities were positively associated with situational well-being before sleep, and this relationship was independent of household and childcare activities.

Recovery during discretionary time after work is associated with improved work engagement and proactive work behavior in the following work day (Sonnentag, 2003). In her diary study of 147 full-time employees (M_{age}=39.0, SD0=9.9), work engagement was measured by using Utrecht Work Enthusiasm Scale (Schaufeli, Salanova, Gonzales-Roma, & Bakker,

2002), and proactive behavior was measured by using items adopted from personal initiative measures (Frese, Fay, Hilburger, Leng, & Tag, 1997). Hierarchical linear modeling results supported that recovery is positively related to increased engagement and proactive behavior at work, and work engagement mediated the relationship between recovery and proactive work behavior.

Recovery from job-related stress during non-work time is also positively associated with various dimensions of work performance (Binnewies, Sonnentag, & Mojza, 2009). Combined paper-based and portable computer-based daily survey data of 99 employees (M_{age}=38.7, SD=10.2) from ten German and Swiss public service administrations were analyzed to investigate the relationship between individual's perception of recovery (i.e., recovery experience) in the morning and job performance. Results from multilevel analyses indicated that state of being recovered in the morning was significantly related to higher levels of task performance, personal initiative, and organizational citizenship behavior at work. Additionally, situational flexibility at work (i.e., job control) moderated the relationship between recovery and job performance. For example, higher job control strengthened the recovery-job performance relationship, and vice versa. Secondary analyses indicated that recovery experiences such as psychological detachment, relaxation, and mastery experience during discretionary time and sleep quality were significant predictors of morning time affect which is significantly associated with multiple performance indicators at work (Sonnentag, Binnewies, & Mojza, 2008).

Psychological Mechanism of Recovery Experience during Discretionary Time

Previous research on recovery experience from work-related stress during discretionary time primarily focused on the influence of non-work activities and events such as social

engagement, physical activity, relaxation, low-effort activity, and vacation, on perceived recovery outcomes (Fritz & Sonnentag, 2006; Sonnentag, 2001; Strauss-Blasche, Reithofer, Schoberserger, Ekmekcioglu, & Marktl, 2005, Westman & Eden, 1997). However, little attention has been given to the psychological processes explaining the relationship between specific discretionary time activities and strategies and observed outcomes of recovery (Sonnentag & Fritz, 2007).

Although the psychological pathways of recovery experience during discretionary time is yet to be fully explored, research in IOP focused on psychological detachment as a psychological mechanism that manifests individual's recovery from organizational stress during discretionary time (Sonnentag, 2012; Sonnentag & Bayer, 2005; Sonnentag & Fritz, 2015). Empirical evidence from IOP research has demonstrated that being mentally disconnected from job related issues during non-working hours is significantly associated with reduced symptoms of psychological strains, increased life satisfaction, motivation, and improved job performance (Davidson et al., 2010; Moreno-Jimenez, Mayo, Sanz-Vergel, Geurts, Rodgriguez-Munoz, & Garrosa, 2009; Siltaloppi, Kinnunen, & Feldt, 2009; Sonnentag, Kuttler, & Fritz, 2010). This stressor-detachment concept (Sonnentag, 2012; Sonnentag & Fritz, 2015) is commonly used in IOP to explain the underlying psychological processes within the relationship between specific discretionary time activities and indicators of recovery from organizational stress.

Psychological Detachment

Recovery from work is significantly associated with lower levels of physical and psychological strain reactions, and improved job-related behavior and well-being to selected empirical studies (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013; Fritz, Sonnentag,

Spector, & McInroe, 2010; Sonnentag & Fritz, 2015). Psychological detachment, defined as mentally disconnecting from work during non-work time (Sonnentag & Bayer, 2005), is a psychological concept that explains individual's recovery experience from work-related stress during discretionary time (Sonnentag & Fritz, 2007). From a work-life balance perspective, individuals who have more clear boundaries between work and non-work realms (i.e., higher role segmentation and lower role integration between life domains) seem to distance themselves better from work-related stressors during discretionary time (Ashforth, Kreiner, & Fugate, 2000).

More specifically, psychological detachment manifests the process of perceived recovery during discretionary time (Sonnentag, 2012; Sonnentag & Fritz, 2015). Empirical research in IOP has demonstrated that having a sense of disengagement from job related issues while engaging in leisure activities during non-work hours is significantly associated with reduced symptoms of psychological strains, less role conflict at workplace, increased life satisfaction, and improved motivation and performance at work (Davidson et al., 2010; Moreno-Jimenez, Mayo, Sanz-Vergel, Geurts, Rodriguez-Munoz, & Garrosa, 2009; Siltaloppi, Kinnunen, & Feldt, 2009; Sonnentag, Kuttler, & Fritz, 2010).

Employees may perceive their working environment as more stressful when psychological detachment from work during non-work time is insufficient. In their survey study of 136 protestant pastors (M_{age}=48.2, SD=9.1) and their spouses (N=97, M_{age}=46.8, SD=8.1), Sonnentag, Kuttler, and Fritz (2010) demonstrated that the relationship between subjective workload and emotional exhaustion as well as need for recovery was partially mediated by both employee and spouse's psychological detachment measured using Recovery Experience Questionnaire (REQ) (Sonnentag & Fritz, 2007). Psychological detachment also moderates the spillover effect (Ilies, Schwind, Wagner, Johnson, DeRue, & Ilgen, 2007; Matjasko & Feldman,

2006) between work and home, suggesting that mentally disengaging from work may protect individual's non-work life domains such as sleep quality and family interaction against negative affects encountered at work (Sonnentag & Binnewies, 2013).

Workload is negatively associated with psychological detachment (Cropley & Millward Purvis, 2003; Sonnentag & Bayer, 2005; Sonnentag & Kruel, 2006). In a study of 148 German school teachers (M_{age}=47.5, SD=8.8), multiple job stressors including workload, job involvement, and recovery-related self-efficacy was assessed to examine indicators of psychological detachment (Sonnentag & Kruel, 2006). Multiple regression analyses results indicated that quantitative workload is significantly related to levels of self and family reported psychological detachment, independent of job involvement and recovery-related self-efficacy.

Individual preferences of work-life boundary may influence psychological detachment. A foundational work of Park, Fritz, and Jex (2011) suggested that employees who preferred more clear segmentation between work and personal life domains experienced higher degrees of psychological detachment during discretionary time. Furthermore, a dyadic study with 114 dual-earner couples (N=228) conducted by Hahn and Dormann (2013) showed that not only employees' preferences of work-life segmentation but also their partners' preferences of work-life segmentation were linked to employees' psychological detachment.

Psychological Detachment and Job Performance

Switching off mentally from work during discretionary time is critical for maintaining and enhancing performance at work. A day-level study using within subject design by Sonnentag, Binnewies, and Mojza (2008) suggested that psychological detachment during non-work time at home may positively influence job engagement by improving morning affect in the

subsequent morning. A longitudinal study (Sonnentag, Binnewies, & Mojza, 2010) showed that psychological detachment moderates the relationship between job demands and work engagement, implying that the benefits of distancing from work during discretionary time may last over time.

Fritz, Yankelevich, Zarubin, and Barger (2010) conducted a cross-sectional study to examine the relationship between different levels of psychological detachment (e.g., low, medium, and high detachment) and job performance. Based on previous findings that too low as well as very high detachment from work may be detrimental to performance at work (Ashforth, Kreiner, & Fugate, 2000), it was hypothesized that moderate levels of psychological detachment is most favorable for task performance and proactive behavior at workplace. Hierarchical regression analyses results revealed a curvilinear relationship between psychological detachment and indicators of job performance supporting the medium-detachment and high-performance relationship as hypothesized.

Psychological Detachment and Well-being

Research puts forward that mentally distancing from work during discretionary time is associated with indicators of employee well-being such as emotional exhaustion, life satisfaction, and bedtime affect and mood (Sonnentag & Bayer, 2005; Sonnentag & Fritz, 2007, Sonnentag & Natter, 2004). For instance, in a dyadic study of 136 full-time pastors (M_{age}=48.2, SD=9.1, 29.7% women) in Switzerland, Sonnentag, Kuttler, and Fritz (2010) demonstrated that lack of psychological detachment during discretionary time is significantly associated with higher scores in self-reported emotional exhaustion and need for recovery.

A linear dose-response relationship between psychological detachment and well-being has been suggested by research. Fritz, Yankelevich, Zarubin, and Barger (2010) conducted a dyadic study to examine the relationship between varying degrees of self-reported psychological detachment and indicators of well-being (i.e., emotional exhaustion & life satisfaction) reported by employees' significant others. Participants were 107 administrative employees (M_{age}=45, SD=10.71, 95% women, 94% full-time employment) and their significant others from colleges and universities in the US. Hierarchical regression analyses results showed that psychological detachment during discretionary time is significantly associated with employees' well-being in a dose-response pattern.

Another dyadic study conducted by Hahn and Dormann (2013) demonstrated that employees' and their partners' psychological detachment during non-work time may influence employees' quality of life. Psychological detachment from work during discretionary time and life satisfaction were measured among 228 heterosexual dual-earner couples in the US. Statistical analyses showed that psychological detachment within dual-earner dyads are significantly related, and not only employees' but also their partners' psychological detachment predicted employees' well-being.

A longitudinal study found that benefits of psychological detachment on individual's well-being may last up to a year (Sonnentag, Binnewies, & Mojza, 2010). 309 German and Swiss non-profit organization workers' psychological detachment was measured at baseline, and emotional exhaustion and psychosomatic complaints were assessed one year later. Study results indicated that psychological detachment is inversely associated with compromised well-being measures over one-year period. Thus, being mentally disconnected from work during discretionary time may protect the later onset of impaired well-being.

Organizational Stress in Men's Professional Tennis Tour

Examining a professional sport context as a workplace allows the application of two important perspectives to SEP research. Frist, it allows the concept of organizational stress, defined as the difference between personal resources and environmental demands at workplace (Shirom, 1982), to be applied in stress management research in SEP. Although elite athletes experience various types of biopsychosocial stresses in pursuit for athletic excellence, publicity, and financial reward (Weinberg & Gould, 2010, p. 505), only few studies have examined organizational stress in professional sport with a standpoint of viewing the context as a workplace. Second, it allows the application of work-life balance perspective to current stress management literature in SEP. Specifically, a clear segmentation between work and life domains may provide opportunity for employing recovery from work during non-work time model (Demerouti, Bakker, Geurts, & Taris, 2009; Demerouti, Bakker, Sonnentag, & Fullagar, 2012; Sonnentag, 2012; Sonnentag & Fritz, 2015) in professional sport research.

Since 1990, the ATP Tour has grown in terms of number of tournaments, television broadcast package sales, revenue, prize money, organizational sponsorship, and media attention under the professional management of the ATP. One side of this is a popular year around sporting event with over 260,000 annual on-site attendance. On the other hand, the circuit is a workplace for professional tennis athletes with continuous high demands and pressure to win and survive.

According to ATP World Tour Media Guide (2018), 66 tournaments are played in 64 different cities in 6 different continents for 46 weeks throughout the season from January to November. Several unique features distinguish the professional tennis circuit from other

professional sports; lengthy season with a very short off-season, extensive travel, week to week tournament structure and schedule, and weekly updated ranking and prize money system. The interaction between socioenvironmental (e.g., away from family and friends, frequent change of food, culture, and time-zones, etc.) demands and stressors around training and competition creates a complex environment to overcome every week and all year around.

While some SEP literature focused on stress and stress management in competitive tennis, little research has employed the concepts of organizational stress and work-life segmentation to examine the benefits of stress management on athletic performance and well-being in professional tennis. In the following section, three categories of common organizational stress (i.e., hardships of travel, structure and competitive nature, & financial pressure) specific to men's professional tennis tour are identified based on the organization and management of the ATP described in the previous chapter, personal anecdotes, and empirical evidence.

Hardships of Travel. Players competing in the ATP Tour often express the hardship of the frequency, duration, cost, uncertainty of schedule, as well as negative outcomes of extensive travel which is a fundamental part of the professional circuit. As the ATP Tour calendar runs for 46 consecutive weeks, players would typically spend about two thirds of a calendar year in foreign countries and cities for tournament participation while being away from home. Travel associated with this schedule usually involves long-haul flights, constant changes of language and culture, and extended hotel stays. What is more, this travel schedule subject to frequent modification affected by personal and environmental factors such as tournament result, physical and mental fatigue, weather, and homesickness.

Empirical evidence submits that professional tennis players experience multiple types of stress stemming from extensive amount as well as high degrees of uncertainty of travel. For instance, Allison and Meyer (1988) conducted a study to examine female professional tennis players' perception about their competitive experiences and subsequent retirement from the professional tennis circuit. Qualitative analyses of interviews and questionnaires from 20 female tennis professionals indicated that being away from their family and significant others for extended period contributed to sense of loneliness as a source of frustration while competing in the tour.

Structure and Competitive Nature of the ATP Tour. The structure and competitive nature of professional tennis tour may contribute to the development of organizational stress among athletes. For example, week-to-week based ranking system is significantly associated with negative stress responses in competitive tennis. For example, studies demonstrated that weekly updated ranking system produce high degrees of pressure that may lead to career ending decisions in both men and women tennis professionals (Allison & Meyer, 1988, Geyer, 2010).

The win-or-go-home tournament structure creates a stressful environment for athletes. Some researchers found that professional tennis players' stress hormone levels are significantly higher around first round match each week (Filaire, Alix, Ferrand, & Verger, 2009). One possible explanation for this stress response is the nature of the tournament structure which allows only one player (i.e., tournament champion) to finish without losing while losing is inevitable for rest of the players every week.

Losing in early rounds of a tournament is regarded as a stressful event unique in professional tennis. Due to its negative implications, early elimination is an event which players

want to avoid every week, although is more likely to happen often throughout the season. In general, early elimination refers to losing from the first-round match before the Wednesday of each tournament, and approximately 50% of players in the main draw faces this situation every week. Early exit from a tournament is often followed by various degrees of stressors and hassles such as adjustments in travel and accommodation, loss of ranking points and prize money, and loss of opportunity to play competitive matches for extended number of days. Below are comments from professional tennis players about early round losses and the subsequent period until next competition. Feliciano Lopez of Spain commented:

> Every week (sigh). It's something that's part of your job. You know you are going to lose every week, probably. You're lucky if you win one tournament a year… Loosing is something that is going to happen, for sure, so you have to accept it. As soon as you accept it, you can handle the situation better (Walsh, 2015, n.p.).

A Grand Slam singles finalist and doubles champion, Lucie Safarova of Czech Republic commented:

> It's kind of hard. Not many sports have so many losses. The happiness from victories are so little against the losses you have each week… (Walsh, 2015, n.p.)

Similarly, Yongil Yoon who competed in the ATP Tour in the late 1990s and early 2000s commented about the difficulty of being a professional tennis player. In a personal conversation, he recalled:

> You can lose a match in maybe two hours, but it doesn't take too long to realize that the cost is expensive. No free hotel rooms and foods anymore, long travel, lose ranking points, sudden homesickness and so on. I have experienced this myself as a player, and

saw many talented young players giving up their career because they couldn't handle this situation well (Y. Yoon, personal conversation, March 15, 2016).

Financial Pressure. Research shows that the risk of chocking is high among male tennis players contending under the high competitive nature with high monetary rewards in modern professional tennis (Cohen-Zada, Krumer, Rosenboim, & Shapir, 2017). Also, financial pressure was one of the significant factors contributed to quit behavior among players competed in the ATP Tour from 1985 to 2007 (Geyer, 2010). As such, financial factors may act as a significant stressor among athletes competing in the ATP Tour. For example, on top of fighting for greater prize money, high overhead costs for traveling and training year around can be stressful for players. As per ATP rule, players receive limited complimentary accommodation at official tournament hotels based on entry status (i.e., qualifying or main draw) and tournament level, and transportation mainly between airports, official hotels, and tournament sites. Player in a main draw of ATP 250 event would receive a guaranteed courtesy hotel room for five nights starting on the Saturday before start of the event and until the Wednesday during tournament week. That is, however, if a player loses on or before Wednesday, he becomes responsible for any additional accommodation costs. In addition, players are often responsible for their staff members' (e.g., coaches, physiotherapists, trainers, etc.) travel, hotel, dining, and salary which easily exceeds their own expenses associated with living and competing in the circuit.

Summary

In summary, stress is the ongoing interaction between personal and environmental resources and situational demands. Focusing on cognitive (i.e., stress appraisal) and behavioral (i.e., coping) components of stress process has driven the mainstream stress management

literature in SEP. IOP research guided by work-life balance perspective observed that recovery experience during discretionary time is significantly associated with job performance and psychological well-being. IOP literature focused on psychological detachment as a possible psychological pathway for this relationship. Despite the stressful nature of the professional tennis tour as a workplace, the significance of recovery experience during discretionary time in the ATP Tour are yet to be fully discovered. Based on the lived-experiences of current and former athletes who competed in the ATP Tour, this study examined male professional tennis players' discretionary time activities and strategies associated with recovery outcomes and its possible psychological mechanisms.

CHAPTER IV

ENQUIRY

As emphasized in previous chapters, this study is highlighted with my personal experiences and in-depth interviews with former and current players in the ATP Tour. Methods and theories common to qualitative inquiry and physical cultural studies helped to frame the research questions of professional male tennis players' experiences of recovery from organizational stress and its psychological processes during discretionary time. Study protocol was approved by the Institutional Review Board (IRB) in 2016 (appendix B). Qualitative data were collected through face-to-face and telephone interviews, personal conversations, and on-line and paper-based news magazine articles. Also, players' win-loss record, ranking history, ranking points breakdown, and prize money data were retrieved from ATP Tour and ATP Playerzone website.

This chapter begins with addressing my positionality as a researcher conducting a qualitative inquiry in the social world of professional tennis. Then, I discuss the use of interpretative phenomenological analysis (IPA) as an interpretative methodology in SEP research. In addition, my personal view of knowing and being (i.e., epistemological and ontological orientations) for conducting qualitative research is portrayed. This chapter ends with detailed information regarding procedures for data collection and analysis.

Positionality

I identify myself as a Korean researcher with graduate training from an institution in the US and having multiple years of experience in the professional tennis industry. It is particularly

important to acknowledge that my view of professional tennis would depend on different positions and privileges I hold, and ultimately affect current and future research of my own.

I recognize that my position and experience in the professional tennis industry as a sport psychology consultant and player's agent provided in-depth understanding of the structure of the study context as well as ease of access to professional tennis players and research fields (e.g., tournament site, hotel, player's lounge, training camps, etc.). I acknowledge my privileged position as a Korean researcher with working experience at the highest level of men's tennis, and that many Asian professional tennis players helped me in this project may feel more comfortable sharing their personal experiences, thoughts, and opinions. I am familiar with the social norms, common behaviors, structure and culture of the ATP Tour, as well as holding some degree of customary presence necessary for transparency and invisibility as an investigator employing a qualitative, cultural, and interpretive approach in sport and exercise psychology research (Angrosino & Mays de Perez, 2000; Krane & Baird, 2005; Taylor, Bogdan, & DeVault, 2015).

I am an avid tennis player and fan. Being involved in tennis in any capacity (e.g., playing, watching, stringing racquets, teaching, working, research, etc) means something special to me. I understand the pressure, tension, and feelings of rewarding experiences associated with playing a tournament and know what it means to win the last point in a final match as well as losing in the first round. I started playing tennis at the age of nine, and never stopped playing since then. I always brought my tennis racquets when traveling. Popular tourist attractions such as the Eiffel Tour or Arc du Triomphe were out of my interest while in Paris, but I rather visited local tennis clubs to play pick up tennis matches. I met new people and made new friends on tennis courts. Tennis has been an important part of myself as well as means to understand the world, and I feel

empathy for another tennis ethnography researcher, Jensen (2012), "I would have loved to have made it as a professional tennis player" (pp. 29).

Interpretative Phenomenological Analysis in Sport and Exercise Psychology

Qualitative research has progressively increased its acceptance within the field of SEP, however many scholars have called for methodological diversity and flexibility to capture a more detailed explanation of the social world of sport and exercise (Biddle, Markland, Gilbourne, Chatzisarantis, & Sparkes, 2001; Culver, Gilbert, & Trudel, 2003; Krane, Andersen, & Strean, 1997; Krane & Baird, 2005). Interpretative phenomenological analysis (IPA) is a qualitative methodology developed for an in-depth examination of individuals' subjective experiences (Smith, Flowers, & Larkin, 2009). More specifically, IPA is characterized by focusing on differences and similarities (i.e., idiographic) between lived-experiences of multiple individuals in a similar context (i.e., phenomenological), and researcher's interpretation of such experiences (i.e., hermeneutic). IPA has been employed in different topics in SEP research such as body image (Dimler, McFadden, & McHugh, 2017), transition into and out from professional sport (Brown, Webb, Robinson, & Cotgreave, 2018; Park, 2012; Sanders & Winter, 2016), player development (Miller, Cronin, & Baker, 2015), goal orientation (Sebire, Standage, Gillison, & Vansteenkiste, 2013), and exercise adherence (Chatfield & Hallam, 2016; Pridgeon & Grogan, 2012).

Epistemological and Ontological Orientation

One of the challenges I faced during early stages of my graduate training in SEP was to work within the paradigm and subsequent research culture grounded in a post-positivism perspective. Research practices heavily relying on the assumption that objectivity of a researcher

(i.e., the researcher can be a true observer) is possible seemed to contradict with the interpersonal nature of sport and exercise and its research. For example, in a 6-months randomized-controlled exercise intervention, I observed and experienced the interactions between participant and research staff which subsequently influenced how investigators treat (both positively and negatively) participants in a daily basis, and vice versa. However, there were little methodological alternatives to account for this subjective and complex nature of human behavior during the data collection process. Such research paradigm also heavily influenced the data analysis process which rarely allowed a reciprocal meaning-making process between the researcher and participant based on their pre-existing knowledge, experiences, perspectives, imagination, and interpretation. As a research assistant, I had written down my experiences and feelings about the daily interaction with exercise instructors, participants, and other research staff in personal notes and diary. I found interesting insights and stories through this process and believed that such information missing from the research projects in which I was previously involved may help to better understand human behavior in a physical activity research study. Such experience facilitated my endeavor of searching for a methodological outlet that accounts for subjectivity in knowledge-formulating process within behavioral science.

It is for this reason that I decided to conduct this research project with commitment to an interpretive and constructivist epistemological orientation. Such orientation emphasizes multiple meanings of reality; relativist ontological perspective, and interaction between the researcher and the interlocutor in knowledge formulating process; subjective epistemological and hermeneutic methodological perspective (Brown, Webb, Robinson, & Cotgreave, 2018; Markula & Silk, 2011, pp. 33). Subsequently, methodology employed in this study (i.e., IPA) is grounded on relativist and critical realist ontological orientation (Shinebourne, 2011). I believe that focusing

on lived-experiences of individuals as well as its interpretation through double-hermeneutic cycle (i.e., researcher's attempt to make sense of interlocutor's subjective experience) would allow me to provide a more complete explanation of the psychological aspects of recovery from organizational stress during discretionary time in the men's professional tennis tour.

Interlocutors

I interviewed ten male former and current professional tennis players (M_{age}=28.89 years) from Korea, Taiwan, Thailand, and India, who had multiple years of competition experience in the ATP Tour ($M_{experience}$=9.33 years). At the time of participating in this study, five players were still active in the ATP Tour, and the other five players had retired from their careers as a professional athlete. Based on biophysical data available on ATP Tour website, interlocutors had an average height of 179.6 cm and weight of 72.7 kg at the time of active status in the professional tennis tour competition. Among ten players, the highest career singles ranking achieved was 19, and the lowest was 877. Total career prize money earned ranged from $7,279 to $4,823,490. During data collection and analysis, pseudonyms were used to protect interlocutors' personal information and confidentiality. Five interviews were conducted in English, and the other five interviews were conducted in Korean. In addition, I had different degrees of personal relationship with the interlocutors. For example, I had long-term friendship (e.g., more than five years) with some interlocutors, while I first met others during the winter training camp in Bangkok, Thailand. Therefore, I acknowledge that I had varying personal interactions with the interlocutors beyond the interviews which each lasted 23 minutes in average. Along with a brief bio-sketch, details about the personal relationship with each interlocutor are briefly described.

Adam was 33 years old at the time of his first interview, and he was still competing in the ATP Tour as of 2018. After a successful junior career in the International Tennis Federation (ITF) circuit (no. 3 in ITF junior singles ranking), he started competing in the ATP Tour in 2001. He has 29 ATP Challenger singles and 3 ATP doubles titles and achieved career high singles ranking of 33. Adam was married and had one child. I first met Adam during one of the tournaments in the US during summer 2015 and became good friends since then. Although I met Adam in many different places (e.g., tournaments, restaurants, gym, etc.), it was my first time to meet him in winter training camp.

Bryan was 20 years old at the time of participating in this study. He won 4 career titles in the ITF circuit during his junior years, and started competing in the ATP Tour since 2014. His career high singles ranking is 447, and he mainly competes in the ATP Challenger Tour and ITF Futures events. I had no acquaintance with Bryan before Adam introduce him to me in the beginning of the winter training camp. Although he did not talk much on and off the court, I had opportunities to talk to him during a few lunchtime.

Chase was 20 years old when he first participated in this study. He reached no. 7 in ITF junior singles rankings and made his ATP Tour level debut in 2014. After his first interview in 2016, he won his first ATP Tour singles title in 2017 and broke career high rankings for three consecutive years. I have worked with Chase in athlete-consultant relationship since 2014.

David was 43 years old at the time of interview and retired from professional tennis in 2004. He has one ATP Challenger singles title and achieved a career high singles ranking of 140. He pursued a coaching career since retirement and worked mainly with players competing in the

ATP Tour. He was married and had three children. I have known David since 2002. I also worked with him in the Korean national team (Davis Cup team) in 2004-2008.

Ethan was 35 years old at the time of participating in this study. While pursuing a professional tennis career, he reached as high as 160 in ATP singles ranking. He retired in 2013 and had been coaching a player who competes in the ATP Challenger Tour. He was married and had two children. I have known Ethan since 2003. I also worked with him as a manager when he played for the Korean Davis Cup team in 2006-2007. However, it was the first time to meet him since 2010 when I left Korea for attending graduate school in the US.

Frank was 35 years old at the time of his first interview. He competed in the ATP Tour for 18 years and retired in 2015. He has nine ATP Challenger singles titles and one ATP Tour doubles title. His highest singles ranking was 77 and retired from professional tennis in 2015. He was married and had two children. Frank and I knew each other but did not meet until the winter training camp. I worked with Frank organizing and planning the winter training camp.

George was 31 years old at the time of his research participation. After a successful junior career, he started competing in the professional tennis tour in 2001. He reached as high as 877 in ATP singles rankings and retired from professional tennis in 2008. He was pursuing a graduate degree in exercise science while coaching a professional tennis player part-time. He was married and had one child. I first met George in 2008 when we were working at a professional tennis academy in Korea. We were good friends, but never met since 2010 when I left Korea.

Frank was 19 years old at the time of his first interview. As a junior tennis player, he

reached singles finals in a Grand Slam Junior Championship. He turned pro in 2013 and had been mainly competing in the ATP Challenger events. I had no previous relationship with Frank.

Issac was 24 years old at the time of his participation in this research project. He was the winner of a Grand Slam Junior Championship singles event reached no. 1 in ITF junior rankings. He played division one college tennis in the US for four years and turned pro in 2008. He reached career high singles ranking of 88, and still competes in the ATP Tour. I had no previous relationship with Issac.

Jason was 40 years old at the time of his first interview. He has two ATP Tour titles (singles and doubles) and reached as high as 36 in ATP singles rankings during his career. At the time of participating in this study, he had no professional affiliation with the ATP Tour. He was married and had three children. I knew Jason since 2002. I used to work for his non-profit foundation in Korea until I moved to the US in 2010.

Cultural Analysis

Nine current and former professional tennis players were recruited during an off-season training camp held in Bangkok, Thailand. One interlocutor whom I had personal connection was interviewed in his current region of residency is the US. All players were asked if they were willing to share their experience for the study examining discretionary time experience, athletic performance, and well-being in the professional tennis tour. Once they agree to participate, they were given an IRB consent form (appendix C) which included purpose and objective of the research, procedures, inclusion and exclusion criteria, potential risks and benefits, data confidentiality, and contact information. After a thorough explanation of the consent form,

players were asked again about their willingness to participate in the study, and a verbal consent was obtained as per IRB protocol.

A semi-structured interview guide (appendix D) was developed and used. The interview guide included questions regarding demographics, tennis career (e.g., years of experience, career highlights, career goals), perceptions about tennis, demands and challenges of competing in the tour, daily routine, early elimination, hobbies, good and bad examples of discretionary time experiences, life satisfaction, cultural and environmental factors, and verbal consent for follow-up interviews and/or questionnaires. Time, date and location for interviews were selected based on each player's preference during the training camp.

Interviews were audio recorded using a voice recorder supporting 320 kbps audio quality. Audio recordings were transferred to a passcode-locked external hard disk drive for data security and deleted from the voice recorder to ensure available storage remaining for next scheduled interview as well as to avoid any technical interaction and malfunctioning. Then, audio recorded interviews were transcribed. During this process, only personal headphone was used to warrant data confidentiality and accurate transcription. Total duration of ten interviews was 232 minutes. Individual interview time ranged between 19 and 31 minutes with an average of 23 minutes. Member checking was used to establish data credibility (Patton, 2002). After each interview, all interlocutors had an opportunity to review a copy of their interview transcripts. All ten players confirmed that the transcripts accurately represented what they have said about their personal experiences during the interview.

In addition to demographic and interview data, players' week-to-week ranking history and detailed win-loss record by tournaments and opponents were retrieved from the ATP Tour

website. Weekly ranking history as well as dates for career high and low rankings were entered in Excel spreadsheet. This information was used to compare differences in performance record between before and after significant positive or negative discretionary time experiences mentioned during the interview.

In the respect for understanding male professional tennis players' experiences and perceptions about discretionary time and its relationship to recovering from organizational stress in the ATP Tour, the analysis of interviewed data was guided by Interpretive Phenomenological Analysis (IPA). IPA, grounded in phenomenology, hermeneutics, and idiography, is developed for examination of individuals' particular life experiences with their own perspectives (Smith, Flowers, & Larkin, 2009). As part of IPA, immersing myself in the original data is an essential step to gain an in-depth understanding of individual's life experiences. I have read and re-read the original transcripts while listening to the audio-recording to familiarize myself with the raw data. Also, I saved the audio-recordings in double locked (i.e., six digits passcode & fingerprint) smartphone device and listened and re-listened using a wireless headphone for approximately two months. In addition, I used context-descriptive notes and linguistic-exploratory notes that I recorded during interviews to analyze individuals' emotions and language use. Conceptual coding and interpretation based on related literature followed in the later part of this process.

CHAPTER V

INTERVIEWS AND CONVERSATIONS – HIGHLIGHTS OF IMPORTANT POINTS

As overviewed above, the purpose of this project was to understand the psychological aspects of recovery experience during discretionary time specific to the demanding environment of men's professional tennis tour as a workplace. Data regarding lived-experiences of recovery during discretionary time collected through semi-structured interviews, news articles, as well as personal conversations were analyzed using IPA technique to understand the significance of the organizational stress, identify activities during discretionary time associated with outcomes of recovery from the organizational stress, and explore the underlying psychological process of recovery experience during discretionary time in the men's professional tennis tour. In response to the call for a more contextually-valid and in-depth investigation of stress, recovery, and athletic performance relationship (Kellmann & Beckman, 2003), the findings of this study illustrate the voices of current and former professional male tennis players making sense of their recovery experiences and its possible association with performance and well-being.

Results are organized into four parts to answer the research questions and describe the specifics of the super-ordinate themes. The first section illustrates male professional tennis players' beliefs and perceptions about the organizational stresses specific to the competitive environment and nature of the ATP Tour and its relationship to athletic performance, motivation, and subjective well-being (Research question 1). Then, super-ordinate themes (i.e., psychological detachment, mastery, & developing sense of belonging and partnership) manifesting the underlying psychological processes within the relationships between discretionary time activities and outcomes of recovery among current and former athletes in the ATP Tour are presented in three separate sections (Research questions 2 &3).

Organizational Stress in the ATP Tour: The Uncertainty and Complexity

While discussing their professional tennis career, players pointed out adjusting to the uncertainty and complexity of the professional tennis tour as the keys to survive in their workplace. Hence, majority of players perceived that physical and psychological challenges in the professional tennis tour influenced their thoughts and behaviors related to the competition and life in the ATP Tour. In this section, the significance of organizational stress in the ATP Tour and its relationship to athletic performance, motivation, well-being are illustrated based on the lived-experiences of dealing with three critical parts of the men's professional tennis tour: the competition structure of the ATP tour; the complexity and consequences of frequent travel; and the challenges associated with second language (i.e., English).

The Competition Structure of the ATP Tour

Male professional tennis players identified the competition based on single-elimination format (i.e., tournament structure) as a common source of organizational stress in the ATP Tour. Interlocutors in this study emphasized the need for recovery from the competitive nature as they recalled such organizational stress negatively affected their athletic performance and well-being. Despite the demand for physical and psychological recovery from the competition, professional tennis players also expressed the difficulty of having a planned recovery due to the uncertainty and complexity of daily, weekly, and annual schedule in the ATP Tour. This interaction between competition stress and unpredictable schedule further led the interview to discussing the importance of short-term recovery, specifically during non-working time, while competing in the professional tennis tour.

Single-elimination Format in the ATP Tour. Speaking of the role of single-elimination format in creating a stressful environment in the professional tennis tour, Julien Benneteau, a French professional tennis player who won little over $9 million in prize money since 2000, discussed the stressful nature of single-elimination as well as the importance of mentally recovering from frequent failures to stay positive and consistent to achieve a successful career. In a recent interview with the New York Times, he commented:

> I lost every week because I didn't win an ATP singles title…I have known for failure because I lost every week… Then I have to recover and think positively to be ready for the next week and do this week after week, month after month, year after year, to have a career from 2000 to now (Cambers, 2018, p. SP8).

Another veteran from Italy, Paolo Lorenzi who reached as high as number 33 in ATP Rankings admitted that adjusting to the tournament structure as the most difficult part of pursuing a professional tennis career. Paolo said:

> I was lucky because when I was a junior I was not so good, I didn't win too much, so it was a little bit easier. But, it's normal. When you see the draw, just one player will finish the week without losing…I think this is the most difficult part of being a tennis player…You have to think in your mind that you will play 30 weeks, and if you're lucky, just for 28 you will lose. And you have to be lucky, because most of the time you will finish with 30 weeks of the year losing (Cambers, 2018, p. SP8).

Professional athletes in this study also found the tournament structure of the ATP Tour stressful. David, one of the interlocutors whom I interviewed, mentioned his experience with the single-elimination system as "weekly mental challenge". He said:

> It's a challenge for everyone, week after week. Trying to beat your opponent is a challenge, but dealing with what happens after a loss is another (challenge). I played this sport (tennis) since elementary school, and I had a pretty good understanding of how tournament works. However, since I turned pro, different levels of challenges were added. I quickly acknowledged that I would lose (prize) money, drop ranking (points), and pay extra expenses until the following week. Isn't it weird? It's like losing your part-time job in the first or second day and nothing to do until another part-time opportunity next week.

For David, this "weekly mental challenge" sometimes led to a maladaptive thoughts and behavior during discretionary time which negatively influenced his thoughts, emotions, life satisfaction, motivation, and performance. He commented:

> Sometimes, when I lose in the first round, or maybe lose a match that I thought I should have won, I would lie down in bed, and just do nothing. Then, funny things start to creep in my head, like; 'What am I doing here?', 'I am a useless person', or 'Should I just give up?' I am not sure if I exactly wanted to do something during that time, but I can say for sure I couldn't find anything to make myself feel better…I didn't like my life. Sometimes, I am still caught in such negative thoughts and would go to the next tournament site, not ready to fight, and lose again. It's like circulating in that strip, what do you call that (meant the Mobius strip)? Then this just becomes like a bad habit.

Ethan mentioned that he enjoyed his professional tennis career overall. However, overcoming the negative emotions during the time after early elimination from a tournament was extremely difficult and further interfered with his motivation to train and compete. He said:

> I think once I lost seven or eight first rounds in a row in Europe, from French Open week until Wimbledon. I had a fear of Mondays. Every Sunday, I scared of seeing my name on the order of play for the next day (Monday). I knew that I need to check the order of play (to get prepared accordingly), but I had this fear of seeing my name. What if there is my name? Is this going to be another week (of first round loss)? It was very stressful…I was definitely pressured. But, I had nobody around me. Then, I would lose motivation for practice. Practice sessions were not interesting anymore. I worked hard, tried to focus, but as time gets close to the first round, I became very nervous. I could feel my mind is still worn out from what happened in the past weeks…I felt things were going against me.

Henry described the psychological challenges associated with the tournament structure by comparing tennis to other professional sports. He said:

> I think the biggest mental challenge in professional tennis is that you have to fight hard while knowing you don't have a second chance this week. People absolutely cannot imagine how tough this is. I have experienced and also witnessed many other players getting mentally drained from the pressure to win every day after day, and week after week…Think about baseball, for instance, you can lose today even though you did your bets. Losing a match happens because that is sport, however, the biggest difference (between tennis and baseball) is that you have the next day. No matter how bad you play today, your next game is already scheduled for tomorrow, next week, next month, and all-season long. In professional tennis, you only live today. Again, pushing your body and mind under such pressure, is not fun.

Bryan referred to the demanding setting of competing under the single-elimination format as a “fighting against the fear of losing everything”. This suggests the pressure to win under the tournament structure may be linked to other stresses related to financial demands and disruptions in daily and weekly life. He commented:

> …after I turned pro, money started to get in my mind, even during matches. I know (being a) professional athlete is all about making money…but thinking about opponent and how much money I can make, or have to make, at the same time made the stress bigger. I didn’t think this way when I was playing junior tournaments. Every match, every week, it was like fighting against the fear of losing everything. Ranking points, confidence, money, and…The bad thing is that this can happen anytime. Sometimes, if I lost first rounds for two or more weeks straight, I feel like nothing is left and I am basically broken and hard to motivate again.

Weekly Updated Ranking System. As David described above, the knock-out nature of the competition format was subsequently associated with potential stressors such as the pressure of earning more prize money and ranking points and avoiding extra time, effort, and expenses related to modified travel schedule. Particularly, professional tennis players recognized managing ranking points as a salient source of organizational stress in their workplace. To illustrate, players perceived the weekly updated ranking system stressful because it affected the eligibility to play higher-tier tournaments, avoid playing qualifying rounds, and opportunity for sponsorship, endorsement, and ranking bonus money. Ranking points were like the two sides of the same coin for athletes: an opportunity for success as well as a stressful thing to keep up with. Bryan described monitoring ranking points and positions repeatedly throughout the season as

"undesirable experience", and it sometimes negatively influenced his training performance as well as quality of life. He said:

> It's every week after another. Honestly, I wish I could have a weekend free from calculating ranking points earned and lost and projecting where I will be placed in the rankings table (list) next week. Sometimes, I can't focus during practice or gym session in the weekend because I am worrying about my ranking change and everything after (the consequences). It is absolutely an undesirable experience. I feel like I lost my weekend(s)…I like to be in the tour, but I don't like my times thinking about rankings, prize money, and tournament cut-offs every week, again and again.

Jason also shared a similar experience about worrying about ranking points interfering his cognition and performance during a match:

> Sometimes, I think it was in Turkey, I realize I am thinking about how many points I have to defend this week or where I would be placed after this match, rather than just focusing on the match I am playing…I remember sometimes my brain just stops (blackouts) and make bad decisions. (For example) I just go for winner too early when I feel tired both body and mind. I think this is absolutely nonsense, but it happens. Sometimes, I just can't get away from these thoughts in my head. I don't know how much it affected my performance, but I don't think it's a good experience.

George also had difficult time dealing with the ongoing negative thoughts and emotions related to the weekly-updated ranking system while competing in the ATP Tour. He described his experience about living in the ranking race as 'receiving grades every week'. George recalled:

> I don't have much of school experience, but I remember the stress of checking my own grades at the end of the semester and bringing (them) to my parents. It wasn't a fun experience, and I still think it's somewhat harsh for elementary school students. I felt the same way when I check my ranking points and positions every Sunday night. I know that as a professional athlete, you have to accept everything and move on, but that feeling of receiving grades every week, I mean week after week, just made me so stressful. It's not all about how much ranking points I earned or could have earned, but even during practice sessions and sometimes during matches, I thought about how many ranking points I need to defend from last year. It's a very difficult feeling to go through. What I did well around the same time last year, that I was very happy about, is now a stress making myself feel so pressured. My felt like my brain was drained, and not much left for the fight on the court.

Tight Season Schedule. As described above, players exemplified the difficulty of adapting to the competition structure (i.e., single-elimination format and weekly updated ranking system) in the ATP Tour. In addition, tight season schedule added another layer of organizational stress to overcome to achieve success in the professional tennis. To illustrate, the ATP Tour season runs from the first week of January to mid-November. This leaves little room for planned vacation during off-season as most players would spend four to eight weeks working on their fitness and technical adjustments in preparation for the next season. For example, Adam commented on the importance of managing emotions and motivation to compete between tournaments but finding a time and planning for adequate recovery can be challenging under the unpredictable and complex nature of the single-elimination format as well as tight annual schedule. He said:

> I think the season is too long…It's pretty sure (obvious) the season is too long. Unfortunately, the schedule is so tough to go for a vacation, because every year, you think about winter training. So, I think it's important to find a break between tournaments. I know it's tough, it's hard to know (predict) when you will have a half day or full day off, but I know that is the only time and relax and regroup myself. Because, I need to (make myself) feel better and fresh to train and play with high (levels of) focus and spirit to fight.

Research suggests that short-term recovery strategies (e.g., daily recovery) may be more beneficial than long-term strategies (e.g., vacation) for protecting job-performance and quality of life from organizational stress (De Bloom, Kompier, Geurts, de Weerth, Taris, & Sonnentag, 2009; Geurts & Sonnentag, 2006; Sonnentag, 2003; Westman & Etzion, 2001). Similarly, Issac talked about the importance of finding an effective recovery activity during discretionary time that fits the unpredictable daily and weekly schedule in the ATP Tour. He commented that it could be critical in making a difference in one's professional tennis career:

> I think tennis being an elimination sport, a knock-out sport, you don't really have a rest for a day. I kind of hard to predict what is going to happen this week and next week, or maybe next month. So, I think it's important to find what really works for you, other than spending extra time in the gym or practice court, to rest, recover, and keeping your mind fresh for the match. You are not training or practicing, but it's definitely part of your tennis. You really have to understand, scheduling is tough, planning is difficult, but it's important to have some options that helps you regroup and get prepared for next tournament.

Jason shared his experience and thoughts about the long season being a source of stress in the professional tennis tour. He had a historical and realistic understanding of why the season runs for extended periods of time throughout a calendar year. However, despite such knowledge, he confessed that he would sometimes strongly blamed the tournament sponsors and administrations for pushing all the players beyond their physical and mental capacity. Jason commented:

> It's too long. It's way too long. I know players have been raising this as an issue, but it never really raised to the surface. As a former player, I know I tend to stand for the players, but I think the role of players and the burden for players are not adequately recognized. Advertisement is good, sponsorship is good, and I know television broadcasting rights make big money too. Everything is great, but without the players? No way. The tour schedule just became tighter and tighter, year after year. There were clear advantages like more prize money, better environment, welfare for players, and so on. But, I feel like we're getting exploited by the more tournament-more money relationship…Let me tell you something. Periodically, I felt horrible just by seeing tournament title sponsor's advertisement on the court or participating in a promotional event. I didn't feel like the tournament sponsors, the ATP, and the players were having a true win-win relationship. Obviously, the annual schedule is longer and tighter than any other professional sport, and players' voices and opinions are not listened, although they are the ones who get physically and psychologically exhausted.

Frank also recalled that he felt his life was 'stolen' by the year-long weekly tournament schedule. This sense of the imbalance between work and life was a source of adversity that interfered with his life satisfaction and readiness to compete.

> In my culture, we always ask ‘what is good?’ I thought the professional tour was not the best place to have a balance for working hard and living a good life. For me, the season was too long, and too tight. For a long time, I thought like ‘where is my summer vacation?’ and ‘I want my summer back’, something like that. It’s not like a normal job you have several weeks of vacation here and there, especially in the summer, throughout the year. Something normal to everyone, but not for tennis players. I really didn’t like the season schedule.

The Complexity and Consequences of Frequent Travel

Besides the competitive nature of the ATP Tour, professional tennis players recognized the complexity and consequences of frequent travel as another source of organizational stress that hampered their emotions and readiness to compete. In the interview, interlocutors discussed the hardships of adjusting to jet-lag as well as being away from friends and family for extended time, and how it influenced their life on the professional tennis tour.

Jet-lag. Crossing multiple time-zones in a weekly and monthly basis to compete in the professional tennis circuit may disrupt professional tennis athletes’ performance readiness and quality of life.

> Travel broadens the mind, they say, but for the world’s top tennis players it has become more of a necessary evil. For 11 months in the year – one of the longest in professional sports – players criss-cross the globe in search of those elusive ranking points and prize money. Most have a travel schedule that would make even the most hardened frequent flyer shudder, dashing in and out of cities on a weekly basis. And then there is the jet lag (Rossingh, 2016, n.p.)

Indeed, in addition to those I interviewed, a recent CNN segment showcased former Grand Slam champions Petra Kvitova and Sam Stosur who expressed the hardship of adjusting to interrupted daily sleep patterns caused by jet-lags. Petra Kvitova from the Czech Republic said:

> I like waking up early, but here (in Zhuhai, China) it is just impossible…I can't fall asleep early and I can't wake up in the morning. So, when the alarm goes off at 9:30 am, for me it feels like 5:00 am. It's not easy and it is always taking me more time than usual. (Rossingh, 2016, n.p.)

Former US Open champion Sam Stosur of Australia also commented:

> Sometimes the worst travel can be just flying cross-country…From Indian Wells to Florida, it's only three hours (time difference) but it takes all day to get there and it's really difficult to wake up in the morning when you're in Florida after flying from California. I actually thank that's one of the worst jest lags. (Rossingh, 2016, n.p.)

During his interview with me, George discussed how jet-lag significantly impaired his physical and psychological states while competing in the ATP Tour. He called jet-lag as "the start of everything":

> I remember the first time in a long-haul flight to Florida. I think I liked it, and I enjoyed traveling when I played Junior tournaments. After turning pro, I had to travel further, more frequently, and getting used to the jet-lag became very difficult…I got physically drained, and then it affected by feelings and motivation. I think jet-lag was the start of everything. I didn't feel fresh, always tired, couldn't play hundred percent, lost interest in tennis and so on.

For Henry, frequent exposure to jet-lag was one of the reasons he lost motivation to competing in the higher-tier tournaments in the ATP Tour and decided to participate mainly in domestic tournaments. He commented:

> It (Jet-lag) has always been a challenge for me. Usually the first couple of days after arriving (at tournament city) was the worst. I didn't like the feeling of tiredness, headache, along with pressure about the upcoming tournament, especially before couple of days before the tournament begins. I was there, but I would lose motivation for the tournament even before the start of my first game. I didn't have similar issues playing in XXX (home country), and I have to admit that overcoming such issues are critical for competing in international tournaments. Yes, I gave up. Although I have not made it public, but all the stresses related to travel and jet-lag were among the several reasons I decided to just play semi-professional in XXXX (home country).

Being Away from Friends and Family. Traveling around the world for almost the whole calendar year leaves players away from their significant others. Professional tennis players perceived being away from their friends and family as a major stressor competing in the ATP Tour. Kimiko Date, a Japanese female professional tennis player who reached as high as number four in Women's Tennis Association (WTA) rankings in 1995 and retired in 2017, recalled having lack of interpersonal relationships with her friends and family as a significant stressor led to her first retirement in 1996. She commented:

> Despite all the success in my early career, I felt lonely. Very lonely. I just couldn't handle the stress from being away from my home country (Japan). Sometimes, I would just withdraw from the next tournament and fly back to Japan to meet my family and friends.

> As this became more frequent, I lost my motivation to compete, and decided to retire from professional tennis. I know everyone was shocked (Kimiko Date, personal communication, Jan 15, 2016).

Jason talked about what he had to "give up" in interpersonal relationship for achieving success in the professional tennis tour. He commented:

> People might think it's (being a professional tennis player) a fancy job. You get to travel around the world, stay in nice hotels, and work your way up to money and fame. However, I think it's a very unique, I would say very abnormal, environment in terms of building relationships with your friends and family. This was very difficult for me. Using Skype (application for internet-based video and audio call) helped me a lot later in my career, but it wasn't perfect because of the time difference. Also, I felt the conversation and relationship was somewhat superficial, and it didn't fill my mind and emotion enough. I still feel like I had to give up so much for my career…Later in my career, I tried and actually got along better with other players in the tour, but you know (laugh) my English was terrible, so it was very limited. I think sacrificing family and friend relationships are inevitable but regret that I didn't build close relationship with other players.

In a personal conversation, Yongil Yoon who was ranked number one in men's singles rankings in Korea in the late 1990s commented that the stress of being away from friends and family led to a "compensation mentality" and associated behaviors while back in his home country that negatively influenced his professional tennis career.

> I think I was not a real pro. People talk about my achievements in the (ATP) tour, but I consider myself as a tennis player, but not a professional tennis player. Talking about the stress of being away from your friends and family to compete in the (ATP) tour, yes, it is a significant stress that all players must go through. However, for me, I can say for sure that my career was a failure because I didn't manage the stress in a proper way. I couldn't find a way to manage the stress being disconnected from my home country. Maybe I should have tried something while on the tour, but, you know, my English wasn't great. I think I speak better English now than before. So, what happened is, as soon as I arrive home, I rationalized my binge behaviors with a compensation mentality. I told myself that it's okay and I deserve this because it's been so stressful. Yes, it wasn't the right way, and that is exactly why I say I failed as a professional tennis player and couldn't extend my career. I know, it was definitely not professional and ridiculous, but I think I had no choice and nobody gave me advice because nobody from Korea had experience competing in the ATP Tour (Yongil Yoon, personal conversation, Jan. 15, 2016).

English as a Second Language in the ATP Tour

As Jason and David hinted in their interviews, the language barrier between their native language and the English language was another significant source of organizational stress in the ATP Tour. According to many players, the stresses associated with the limited ability to communicate in English occurred in almost all parts of their life on the tour. Some players perceived lack of capability to exchange words about tennis rules on and off the tennis courts very stressful. Henry shared his experience:

> I always had difficulty appealing to the umpire about calls and tricky situations. Of course, I know the rules, but umpires and linesmen make mistakes. Then, I wanted to appeal and maybe ask questions, but what I can do was usually very limited. I think it was more difficult than just having a normal conversation because my mind would just freeze when I try to speak in English during a tough match. English was so hard, but it was even harder during a competitive tennis match.

Chase talked about the psychology behind appealing and arguing with the umpire during a match and how his ability to communicate in English influenced the on-court experience. He commented:

> I wanted to improve my English to effectively communicate or argue, if possible, with the chair umpire during the match. I learned while playing international junior tournaments that calls and decisions made by the umpire never get overturned, but other players (fluent in English) would comment exactly what he thinks affirmatively (to the umpire), and then would just turn around and move on from there. So, I realized that the whole point of appealing is not to win the argument against the call, but to explicitly say what you want to say and get over it. I think that was giving so much psychological edge to my opponents. So, for me, the stress of English meant something more than just communication. Knowing that my opponents can take advantage of something I don't have, became a huge stress.

Jason who had a successful career in the ATP Tour shared an example of how "fear and low confidence to speak in English" hampered his thoughts before and during an important match. Jason recalled:

> I know this is embarrassing, but it is true. You know the last two players would grab a microphone and each deliver a speech in the trophy ceremony (after the final match of the tournament). I was very uncomfortable and nervous about that. I would say I had a fear and very low confidence about that. Sometimes, the night before the final, I thought maybe I should lose tomorrow so I can just say as little as possible (because usually the winner delivers a longer speech). I knew it was ridiculous to think like that, but it was real. It's embarrassing.

Bryan mentioned that his lack of confidence and ability to communicate in English changed his personality and made his free time boring and even stressful. He commented:

> In XXXX (Bryan's home country), I am a very outgoing person, and that was one of the reasons I loved playing tennis. I enjoyed hanging out with other players and making new friends at new places. It was always fun. However, I became a different person when I started playing international tournaments. I wanted to learn and improve my English to get along with other players, but it was so hard to learn something new while trying to maximize my performance. I would say I had some confusion about setting priorities. I think even my personality has changed since then, and my time off the court became so boring. Until now, it's stressful and not a fun part in the (ATP) tour, and I am worried that I am not enjoying my life at work.

In summary, the unpredictable and complex nature associated with the competition structure of the ATP Tour (i.e., single-elimination, ranking system, tight schedule), the consequences of frequent travel (i.e., jet-lag, being away from friends and family), and the problems related to communicating in English (i.e., appealing against rules and decisions, grown

afraid of making a speech in award ceremonies, influence on personality) were identified as organizational stress that interfered with players' thoughts and behaviors linked to performance and quality of life in the men's professional tennis tour. During the interview, some players also shared lived-experiences about overcoming the organizational stresses in the professional tennis tour especially through different activities during discretionary time, and how such recovery experience influenced their performance and well-being. In the following sections, the details of recovery experiences from organizational stresses in the ATP tour during discretionary time as well as the underlying psychological processes are illustrated.

Psychological Detachment

Research in IOP suggests psychological detachment, defined as mentally distancing from job-related stressors during discretionary time, as a possible psychological concept mediating the relationship between discretionary time experience and recovery outcomes such as decreased strain reactions, enhanced job-performance, and quality of life (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013; Fritz, Sonnentag, Spector, & McInroe, 2010; Sonnentag & Fritz, 2015). Similarly, mentally disengaging from competition-related stress during discretionary time appeared within the lived-experiences of professional athletes participated in this study. Relevant discretionary time activities were; social engagement with other players in the tour, enjoyable activities, finding new places to eat and new things to do, reading books, staying connected with friends and family, and playing different sport. Outcomes of recovery included; positive emotion, motivation, well-being, positive attitude, readiness for competition, emotional stability, feeling refreshed, and ability to stay focused during training, practice, and competition.

Hyung -Taik Lee of Korea was one of the few Asian born athletes competed in the ATP Tour. He recalled in a personal conversation that playing golf during discretionary time while competing in the professional tennis tour helped him detach from tennis-related thoughts and made his life more satisfactory. He recalled:

> …I thought it was funny because I was more excited to play golf (than tennis) in different places. That is how much I loved it. I wasn't thinking about tennis while playing golf, and later on, I realized that I was recovering both physically and mentally quicker, coming to practice and training sessions fresh, and playing better matches. Golf was like a little vacation to me. Further, I (even) thought first round loss is a good thing because I can have golf time. Everything was coming around in a positive circle (H. Lee, personal conversation, Jan. 21, 2014).

Adam referred to socially interacting with other players as "having a good night sleep" which allowed to distract himself from stressful thoughts about chasing ranking points and positions while competing in the professional tennis circuit and influenced maintaining positive emotions. Adam stated:

> When I hang out with friends in the tour, like going out for dinner together and (have) glass of wine or beer, I feel great. Even the next day it's great. It's like having a good night sleep, a really good night sleep. I really like it (interacting with other players) because I feel like a normal life and not thinking about stress. I can feel my body and mind is well, like keeping more positive feeling, and I know I don't worry about things like prize money, ranking, technical problems, and I can just focus on what I have to do during the match. Just run and do my best.

When it comes to choosing activities for discretionary time, enjoyment was the most important thing for Frank. Enjoyable activities during discretionary time helped him to detach from competition related stresses and meant "like a recess at school" which influenced his motivation, life satisfaction, and meaning for life (reason for life).

> …not just for tennis, but, for life overall, I think, is to enjoy the life. You cannot do anything without enjoying. For me, if I feel something is not going well or going wrong, I would stop everything first, and then look back to see if I am enjoying my life. When I am enjoying my time off the court with my coach, friends, other players, and sometimes family, it make me happy and stay positive for my life and competition. When I am enjoying my life is good and it helps me motivated and do my best. It's like a recess at school. Very short time, but you always think about fun things you are going to do…Every week, thinking about tournament, who are you going to play (against), how many (ranking) points to defend, is very stressful, and I have to find something to make me enjoy and forget about negative thinking…I always tried to make my life fun and it gave me reason for life.

Ethan enjoyed socially interacting with other players during discretionary time. Such social engagement helped him disconnect from stress induced from the competitive life on the professional tour and allowed him to see a "new world – without tennis". Ethan mentioned that interacting with other players made him feel positive about his life and "more connected to the world".

> I am a very competitive person, and looked everyone as an enemy when I first turned pro. I thought it was necessary to keep myself motivated, but I soon realized that it just makes

> me tired and not good for me…I made good friends and spent a lot of time outside the tennis court with them, and it was a new world. A world without tennis. I think I can speak up to this experience for young players in my home country. I think you need to learn to live in this new world besides the world of professional tennis. In other word, you need have a balance. Interacting with other players really made me stay positive for my life overall and more connected to the world.

Chase, who broke into the top 100 in the ATP Tour rankings, perceived that focusing on non-tennis related activities such as finding new places to eat and things to do helped to improve his quality of life and competition readiness. In other word, a form of mental distraction during discretionary time was linked to recovery outcomes. He said:

> …it's very difficult to have a planned vacation because the season runs all year long. What I have learned in the past years in I need to make my free time more enjoyable and refreshing. A friend of mine helped me finding places to eat and things to do in different cities during the first two years of my professional tennis career, and it helped me a lot. Now, I know about my options for next week if I happen to have a free time. Of course, there are places I prefer over others, but at least I know what is coming, I can handle things better both short term as well as long term…I feel my life is more complete and positive, refreshed, and emotionally recharged for the following competition.

Former female Japanese professional tennis player, Kimiko Date, who returned to the professional tennis tour after 12 years of the initial retirement, described how connecting with friends and family using the new technology (i.e., internet and smartphone) helped her mentally

stay away from the fact that she is playing a tournament. She was able to remain emotionally sound, and more focused on her job as a professional athlete. She commented:

> Compared to the days I competed in the tour (in the early-mid 1990s), I think the environment is far better now in term of keeping your everyday life and free time more interactive, and meaningful. In the 90, keeping business cards for good restaurants was probably the only thing I can do for planning free times. Now, I can't ignore how the internet and smartphones changed everyone's life on the tour…For me, using Skype was like a miracle. I can make video calls to my friends and family, and I would feel like I am just a normal person spending a weekend in Japan with them (friends and family), and not playing a tournament. It just made me so much comfortable and relaxed, and focus on what I have to do as an athlete afterwards (Kimiko Date, personal conversation, Jan. 15, 2016).

Hyeon Chung, a 21 years old male player from Korea, surprised the world by becoming the first Korean professional tennis player, the youngest player since 2008 as well as the lowest ranked player since 2004 to reach the semi-final at the Australian Open in 2018. Discussing his run at Melbourne, Hyeon commented that reading a fantasy novel allowed him to detach from competition-related thoughts and helped him to stay more refreshed and focused for the athletic competition. He recollected:

> …It was a coincidence. I just came across by this fantasy novel while searching the internet, and just got into it. It was so fun that I was reading all the time when I am out of practice court or gym. At breakfast, player's lounge, shuttle, and so on. I remember there were days I stayed too late (laugh) in the night because I wanted to read just on more

> chapter…it was interesting because I was never a reader, but it just made me refreshed and stay focused for my job. My results were great. However, at the same time, founding that free time reading can help me stay worry-free and stress-free was amazing thing in Australia (H. Chung, personal conversation, Aug. 3, 2018).

For Jason, staying connected with family and his girlfriend, mostly by international phone calls, helped him to stay away from work-related stress and maintain positive emotions and motivation. He preferred the conversation with family and girlfriend because they had better understanding about the competition pressure in the professional tour, and therefore seldom talk about his performance and match results.

> Oh, I must have spent a lot of money on buying international call cards. It wasn't until later in my career when Skype became available and popular. Before then, I used international call cards to talk to my family and girlfriend. I spent a lot of money, but it was very important for me. During the phone call, for me, it was no tennis time. There was some kind of mutual understanding between us (family, girlfriend, and Jason) that we never talk about tennis. Of course, they had better understanding about the tour than other people, so we seldom talked about my game or the tour…I can't exactly describe the feeling, but I had some degree of happiness after talking to them. Also, it motivated me too. I think I didn't wanted to let them down and make them happy, and I became what I say more proactive under the pressure to win.

Mastery

The second theme emerged from the data in relation to the psychological process of recovery experience during discretionary time was mastery. IOP research understands mastery

experience, defined as challenging and learning activities during non-work time that distracts from work-related issues, as a potential psychological process explaining individual's recovery experience during discretionary time (Demerouti, Bakker, Geurts, & Taris, 2009; Sonnentag & Fritz, 2007). It is understood that mastery experience may enhance recovery by adding domestic resources and improving positive mood and emotion (Hobfoll, 2002; Parkinson & Totterdell, 1999). While talking about their discretionary time experience, professional athletes in this inquiry revealed that non-tennis activities that required some degree of challenge and learning was helpful for recovering from organizational stress in the ATP Tour. Related mastery activities included; learning s second language (i.e., English), studying scientific knowledge relevant to athletic performance, and playing different sport (i.e., golf & soccer). Recovery outcomes included; feeling worth, confidence, life satisfaction, motivation, feeling rewarded, feeling recharged, competence, positive emotion, self-esteem, and feeling refreshed.

Chase mentioned that he had been studying English since he turned pro in effort to communicate better with other players, coaches and trainers, as well as ATP personnel. Although it started as "sometime boring" and "difficult pencil and paper thing", Chase now perceived such effort as an everyday effort to make himself a better person. Studying English not only improved his communication skills, but also broadened the understanding of the Western culture which led to developing a sense of confidence that he can successfully adjust to the professional tennis tour. Also, his life satisfaction was improved. Chase said:

> I started working with a tutor to improve my English…my coach recommended…In the beginning it was something boring because I thought it was a difficult pencil and paper thing. It was hard, and still not easy, but it's a very productive challenge. But, looking back, it was a great decision. I became more confident interacting with people in the tour

> and felt more relaxed. It changed the way I perceive my workplace and more positive thoughts about my life overall. What I really appreciate for my teacher is that he laid out why being able to communicate in English was important and how I can get there. He didn't just teach me vocabularies and expressions. I learned the history and context of the professional tennis tour and it helped me get used to my workplace. For example, having a better understanding of how people think and say in certain situations in the Western culture helped me improve my interview skills…it was a very important part of my professional career for sure.

Bryan commented that he dreams about a successful career as a professional tennis player while studying English during discretionary time. He referred such effort to "preparation for the good days in the tour" and "accomplishment" which motivated him for the competition and life in the men's professional tennis circuit. He mentioned:

> For me, English is so hard. Very hard. But, I feel I am a real pro when doing (studying English) in my free time. It's hard, but I enjoy it and I like it because I can think about my good future, and it's a preparation for the good days in the tour. Also, when I finish a workbook or chapter and use the words in real (life), it's (an experience of) accomplishment. I think, for me, it's a good chance to motivate (myself) for the competition and life in the tour.

Jason talked about his experience about reading articles and watching videos related to exercise physiology and strength and conditioning during discretionary time. Despite some difficulty of understanding academic and professional terms and concepts, he enjoyed learning about mechanisms of human movement and the nature. He perceived that such discretionary time

experience of studying the connection between the scientific knowledge and real world of tennis competition and training was “rewarding” brought a sense of “completeness of life” to him as a professional athlete.

> …later in my career, I got into strength and conditioning. I always sought for a well-known trainer to improve my body strength. At the same time, I go interested in reading and watching videos about sport performance. Like exercise physiology and strength and conditioning. It was very hard to understand, probably because I never went to an actual school, but it added something interesting to my life, and it was rewarding too. All the vocabularies and concepts were hard to understand, but I really liked finding relevant scientific information for my tennis game. I felt a completeness in my life as a professional athlete…like knowing better what I am doing.

George commented that he enjoyed studying English in a regular basis during discretionary time. He mentioned that learning a second language had been challenging, but he felt recharged, competent, and having a meaningful life. George commented:

> I really enjoyed studying English because it made me feel valuable (worth). I really wanted to make my career successful in the ATP Tour, and I thought (being able to communicate in) English was very important to reach that goal…there are many different factors for becoming successful in professional tennis…at least studying English made me feel I am a well-rounded and a competent person…it’s was like I am doing something other (Asian) players aren’t paying attention to. My hotel time is more fun with a good purpose…feeling great after each (English study) sessions and feeling alive and recharged.

Issac mentioned that he enjoyed the "physical and mental challenges" of playing sports other than tennis. For instance, he would put significant amount of time and effort during discretionary time practicing certain skills and shots for soccer, cricket, and golf. Although it usually brings some challenges on the way, experiences of accomplishment positively influenced Issac's mood and self-esteem. He said:

> I enjoy playing other sport. Little bit of golf, and little bit of cricket…I am a big soccer fan too…Sometimes, I would modify my practice schedule…to catch up big matches. I think playing (rather than just watching) those sports, I mean a bit more seriously, makes my free time much more meaningful. I think it makes a big difference. It really does, and helps you stay fresh and enjoyable in the tour…I would feel worth and my self-esteem is pretty high when I master some soccer skills or cricket…same for beating my golf record or mastering a specific (golf) club. You have to find simple things that make you happy after accomplishing something. That sort of you enjoy doing. At the end of the day, you got to see tennis differently, just as a small aspect of your life. It is your job, but you have to have fun. If you don't have fun, you know you are not going to be good at it. For me, it's making those small accomplishments while having fun playing different sports.

In a personal conversation, Yongil Yoon also commented about delving into golf as a mastery experience during discretionary time. He recalled that he enjoyed the challenges of learning a new sport which ultimately helped him stay refreshed, recharged, and maintain positive mood. He mentioned:

> …Yes Golf. In the beginning, we (Yongil and his colleague) felt guilty about missing a practice or training session for a round of golf. But, it was so fun, and eventually we both

got very serious. What is all about putting that tiny golf ball into the hole? We talked about golf while eating and always chatted about golf skills and strategies in the player's lounge waiting for out tennis match…I think it made my free time interesting. It's a simple challenge, just putting the ball in to the hole, but it was far more complicated than I initially thought. Difficult questions regarding techniques or tactics arouse one after another, but I enjoyed the challenge and it was fun…I was happy and felt refreshed and energized after golf. We noticed that we were both physically and mentally recovering after playing golf, and started to perform better in tennis games. No more feeling guilty, though (laugh).

Developing Sense of Belonging and Partnership Spirit

Another psychological process lying beneath the relationship between discretionary time activities and recovery outcomes among athletes who competed in the ATP Tour was the development of sense of belonging and partnership spirit. Similar with psychological detachment, developing sense of belonging and partnership spirit was pertinent to interpersonal interactions during discretionary time in the ATP Tour. Relevant outcomes of recovery included: work engagement, positive attitude, feeling refreshed, and motivation.

Adam shared his experience of participating in the ATP Players Council, and how such experience influenced his mindset towards his workplace. To illustrate, Adam came across with a feeling that he is taking an important part in the men's professional tennis tour while discussing items related to the structure, competition, and business of the ATP Tour which ultimately influenced his attitude and motivation at the tennis court. He commented:

> …what I like (about the ATP Player's Council) is everything is well organized. I must say I learned how everything is organized. I have been doing this for several years now and I think it's really good because I am part of the organization, and it make me feel I belong here. When we discuss about tournament schedule, rule change, or sponsorship, now I care about them because I know it's my workplace. I think investing my time for the meetings really changed my thinking about the tour. I feel I belong here and it's a motivation to work harder. I think I started to see the tour and the competition positive. I always tell young players from my country; 'don't be shy (about attending meetings and participating in the decision-making processes) and this is your job and your office.'

Frank recalled that he found competing in the professional tennis tour less stressful and became more motivated as socially interacting with other players more frequently. Specifically, as he felt more "bonded" to other players, he developed a sense of partnership spirit that brought him "another reason to do my best". Frank articulated:

> …I learned the word 'bond' when watching the movie *James Bond 007* with (other) players at hotel. I thought it was interesting because it exactly mean how I felt about hanging out with them. More and more I feel bonded and I saw them as partners, not my opponents. It's not easy to explain, but it's more like a good (positive) competition, no bad (negative) feelings about your opponent, like I am going to beat you! I understand we are all partners (functioning) together, so I have to work hard for myself and also for my partner because that is part of my job. It kind of gave me another reason to do my best for the competition.

Ethan also commented about how he felt more refreshed and motivated after socially engaging with other competitors in the professional tennis tour. What he referred as "appreciation of being part of the tour" explained the relationship between social activities during discretionary time and recovery outcomes. He shared that:

> …traveling alone in the tour…for me battling against loneliness was the most difficult thing.

Work engagement, defined as a "persistent, positive affective-motivational state of fulfillment" (Maslach, Schaufeli, & Leiter, 2001, p. 417; Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002), is influenced by recovery processes taking place during discretionary time (Sonnentag, 2003). Similarly, Henry shared his story about how getting to "know other players more in person" changed his approach to his workplace (i.e., professional tennis tour) and brought a more "positive motivation". To illustrate, as Henry gained more understanding about his fellow competitors and viewed them as "from good friends to good partners", he developed a more positive perception about the competition in the ATP Tour. Henry expressed:

> I had some kind of conflict in my mind. I saw other players getting along with each other pretty well in player's lounge and locker room, but my problem was 'Wow, how is that possible? We are like enemies to each other.' I know it's kind of weird, but it was a big issue for me. I just couldn't get away with the fact that the people I meet every day are actually my enemy to battle against every day and every week…maybe I was too negative…and thinking back my motivation for the competition was all negative too. It was all about pressure to win and all or nothing mentality. But, few years later, I got to know other players more in person. For many years with many players, I had so much fun

and good conversation, and I can say it (the relationship) changed from good friends to good partners…I felt much more comfortable. I didn't have that kind of (negative) motivation anymore and really understood what positive motivation means.

David disclosed his experience about attending players' meetings during major tournaments throughout the season. During his early career, he chose not to attend these meetings because he thought they were a "waste of time". However, later in his career, he learned how hard other players worked in the meetings to represent athletes' rights and improve the working environment in the ATP Tour. Participating in players' meetings changed his view about the competitive environment and structure of the ATP Tour and further motivated him to work hard as a professional athlete.

…it made me become a real professional. I think it's really important to have the experience of working with other players and ATP people as a team. I always received emails and read notices in the player's weekly (i.e., weekly magazine for players) about player's meeting. It's normally during Grand Slam tournaments and some Master's events, but I used to just ignore. I really didn't care about it, and even thought it was waste of time. Few years later, they (ATP administration) made the meeting mandatory, and I started to go because I didn't want to pay the fine (laugh)…I was surprised. They were all fighting hard, as if they were on tennis courts, for player's right, like pension program and insurance, and rules and something like that. I felt bad because I didn't care about it before. In the meeting, everyone is nice and cares each other. I can feel it, and we are all partners like office people (officemates), and I think it kind of changed my mindset. In fact, it was not waste of time, and it was worth of my free time. It was an interesting experience to understand such partnership spirit, and it helped me to have

> some meaning for working hard in training and practice…I always tell this (working with other people in the tour as a team) to junior and young players. I hope they understand there are many things to do and learn outside of gym and tennis court that affects their mindset and attitude as a professional athlete. It's really important.

In summary, professional tennis players competing in the ATP Tour perceived the competition structure, extensive travel, and language barrier as significant organizational stresses interfering with their performance, motivation, and well-being. Players shared their lived-experiences of overcoming these organizational stresses during discretionary time. Discretionary time activities associated with recovery outcomes included; social engagement with other competitors, enjoyable activities, finding new foods and attractions, reading, staying connected with friends and family via phone and internet calls, playing and practicing sports (other than tennis), learning second language, studying subjects relevant to athletic performance, and attending formal meetings. With respect to research question 3, three psychological processes underlying the relationship between discretionary time activities and outcomes of recovery from organizational stresses were identified; psychological detachment, mastery, and developing sense of belonging and partnership spirit.

CHAPTER VI

CONCLUSION

> A lance he bore, and underneath one arm
> A stone, and in the opposite hand a shell
> Of a surpassing brightness. Much rejoiced
> The dreaming man that he should have a guide
> To lead him through the desert; and he thought,
> While questioning himself what this strange freight
> Which the newcomer carried through the waste
> Could mean, the arab told him that the stone—
> To give it in the language of the dream—
> Was Euclid's Elements. 'And this', said he,
> 'This other', pointing to the shell, 'this book
> Is something of more worth.' 'And, at the word,
> The stranger', said my friend continuing,
> 'Stretched forth the shell towards me, with command
> That I should hold it to my ear. I did so
> And heard that instant in an unknown tongue,
> Which yet I understood, articulate sounds,
> A loud prophetic blast of harmony,
> And ode in passion uttered, which foretold
> Destruction to the children of the earth
> By deluge now at hand. No sooner ceased
> The song, but with calm look the arab said
> That all was true, that it was even so
> As had been spoken, and that he himself
> Was going then to bury those two books (Wordsworth, 1805, 79-103).

In this inquiry, I have investigated athletes' recovery experience during discretionary time and its underlying socio-psychological pathways in the context of men's professional tennis tour. Based on current and former professional tennis players' lived-experiences of recovery experience during discretionary time portrayed in semi-structured interviews, news articles, and personal conversations, I examined the significance of organizational stress specific to the

competitive environment of the ATP Tour and its relevance to performance, motivation, and well-being, identified discretionary time activities associated with recovery outcomes and analyzed psychological processes explaining professional tennis players' recovery experience during discretionary time. To illustrate, professional athletes competing in the ATP Tour identified the competition format, extensive travel, and language barrier as organizational stress hampering their performance, motivation, well-being, and ultimately career success in the professional tennis tour. Further, players made sense of how certain discretionary activities were associated with recovering from such organizational stresses while competing in the ATP Tour. Within this discourse, three themes (i.e., psychological detachment, mastery, and sense of belonging and partnership spirit) explicating the psychological processes of recovery experience during discretionary time emerged.

This study contributes to the fields of kinesiology, sport and exercise psychology, cultural and interpretive studies of sport, and related areas by highlighting several unique aspects of recovery from organizational stress during discretionary time in elite sport context. Related to this specific dissertation, the examination of the organizational stress in men's professional tennis identified the ATP Tour as a unique working environment highlighted by the uncertainty and complexity in nature. The interaction between knock-out tournament format, tight schedule, and frequent travel created stressful situations in which players have to find ways to overcome on a daily basis. Specifically, different types of stress pertinent to the uncertainty of competition in the men's professional tennis tour were identified. For example, the uncertainty of win-loss record that would directly impact financial circumstances and long-term scheduling on the tour was a common source of stress across the interlocutors. Also, language complications and barriers in communicating with other people in the ATP tour were identified as source of stress

interfering with players' effort to adjust to their workplace. It may be plausible that such stress mirrors differences in cultural values, beliefs, and way of thinking and living between an Asian athlete and a professional sporting environment that has been dominated by Western culture.

In respect to the psychological mechanisms of recovery experience during discretionary time, this study echoed previous findings in IOP research. Specifically, psychological detachment and mastery as psychological pathways describing players' recovery experience during discretionary time emerged across the interviews and personal conversations. Psychological detachment refers to mentally disengaging from work-related tasks during discretionary time (Sonnentag & Bayer, 2005). Corresponding to the Effort-Recovery Model, psychological detachment may affect recovery by blocking attentional and functional resources required for work during discretionary time (Meijman & Mulder, 1998). Activities promoting mastery is characterized by challenging and learning opportunities in pursuit of competence, adeptness, and accomplishment (Sonnentag & Fritz, 2007). Mastery is relevant to the Conservation of Resources Theory (Hobfoll, 2002) that engaging in non-work activities may replenish personal resources (e.g., self-esteem) depleted from stressful work environment (Demerouti, Bakker, Geurts, & Taris, 2009).

This study adds developing sense of belonging and partnership spirit as possible psychological mechanism for recovery experience during discretionary time in men's professional tennis tour. Deeming from Maslow's (1943) hierarchical model of human motivation, need for belongingness from interpersonal relationship may evolve once the basic needs for safety and security are fulfilled. Also, the need to belong fostered by interpersonal relationship is a significant element for human motivation (Baumeister & Leary, 1995) and well-being in team sport (Reinboth & Duda, 2004). Similarly, professional athletes in this study

showed a motivational shift, as a result of socially interacting with other people in the ATP Tour in formal and informal fashions. To illustrate, athletes initially had competitiveness as the basic motivational foundation which was described as “everyone is enemy”, “I am going to beat you”, and “negative motivation”, but later, sense of belonging and partnership spirit inspired another level of motivation portrayed as “partner”, “reason to work harder”, “good motivation”, and “appreciation of being part of the tour”.

Finally, this study provides the feasibility of applying work-life balance and work-life segmentation frameworks into kinesiology research. These frameworks are mainly used in recovery from work-related stress during non-work time research in IOP and allows to examine how individuals recover from stresses specific to a working environment (i.e., organizational stress) during discretionary time. Such perspective was overlooked in kinesiology research in two different ways. First, the majority of kinesiology research views discretionary time (or leisure-time) as an object to promote physical activity and active lifestyle rather than an opportunity for physical and psychological recovery that may influence physical performance and well-being. This may be particularly pertinent to those who are already physically active. Second, although research in kinesiology examined the stress associated with the competitive aspects of elite sport, it rarely viewed the professional sport as a workplace. I argue that this foundational study provides an avenue to applying the concepts of organizational stress and recovery during discretionary time in future kinesiology research, specifically in professional sport contexts.

Although the study presents original findings and implications for future research, I acknowledge that it is not free from limitations. First, professional tennis players participated in this study were all male and Asian, therefore may not fully represent the overall population of

the professional tennis tour. However, I argue that one of the rationales for this study was to conduct a contextually valid and nuanced investigation by overcoming participant access barriers in professional and elite sport research (Kellmann & Beckmann, 2003), and this work may serve as a foundational point for future research. Second, evidence for the relationship between recovery outcomes and actual performance parameters is lacking. I acknowledge that measures of athletic performance such as match results, and aerobic and functional fitness capacities may be used to confirm whether recovery from organizational stress actually influenced performance outcomes. I suggest future research to use win-loss records and ranking history published in ATP Tour website and ATP Media Guide to examine the relationship between recovery outcomes and athletic performance. Third, cognitive and clinical approach to the complexity of stress in high performance sporting environment is lacking. Although work-life dichotomy framework commonly used in industrial and organizational psychology was used, it may not fully describe the varying types and intensities of competition-induced stress. I suggest future research to employ clinical and cognitive stress models. For example, cognitive vulnerability model (Armfield, 2006) explains the relationship between phobic fear acquisition, characterized by perceived danger, disgust, unpredictability, uncontrollability, and vulnerability, and deteriorated human functioning.

Conducting this study, a journey, was full of joy for me as a researcher in the field of kinesiology and avid tennis fan. I have learned so much from the literature as well as from the professional athletes who shared their life experiences. Looking back on my graduate training, the biggest enlightenment I found was the understanding of two different languages we as a human being use to describe the reality; literature and numbers. I acknowledge that both languages are finite and must work together to understand the infinite nature of reality. Looking

forward, I hope to work myself to become a philosopher in the field of kinesiology asking important questions about who we are, what we study, and how should two different approaches work together toward a more complete understanding of human movement. Specifically, I would like to continue my examination and analysis of the professional tennis tour with a purpose to provide a contextually valid, nuanced, and detailed information about the psychological aspects of recovery and its relationship to athletic performance, motivation, well-being. I hope such endeavor will contribute to understanding the significance of recovery experience during discretionary time in kinesiology research at large.

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APPENDIX A: 2018 ATP TOUR CALENDAR

ATP WORLD TOUR 2018 Season

Week	Start Date	City	Current Tournament Name	Surface	Draw	Prize Money	Total Financial Commitment**
1	Dec 31	Brisbane [1]	Brisbane International presented by Suncorp	H	28	$468,910	$528,910
	Jan 1	Doha [7]	Qatar ExxonMobil Open	H	32	$1,286,675	$1,386,665
	Jan 1	Pune [7]	Tata Open Maharashtra	H	28	$501,345	$561,345
2	Jan 7	Sydney [1, 7]	Sydney International	H	28	$468,910	$528,910
	Jan 8	Auckland [7]	ASB Classic	H	28	$501,345	$561,345
3	Jan 15	Melbourne	Australian Open*	H	128		
4							
5	Feb 2		Davis Cup First Round*				
6	Feb 5	Montpellier	Open Sud de France	IH	28	€ 501,345	€ 561,345
	Feb 5	Sofia	DIEMA XTRA Sofia Open	IH	28	€ 501,345	€ 561,345
	Feb 5	Quito	Ecuador Open	CL	28	$501,345	$561,345
7	Feb 12	Rotterdam	ABN AMRO World Tennis Tournament	IH	32	€ 1,862,925	€ 1,996,245
	Feb 12	New York	New York Open	IH	28	$668,460	$748,450
	Feb 12	Buenos Aires	Argentina Open	CL	28	$568,190	$648,180
8	Feb 19	Rio de Janeiro	Rio Open presented by Claro	CL	32	$1,695,825	$1,842,475
	Feb 19	Marseille	Open 13 Provence	IH	28	€ 645,485	€ 718,810
	Feb 19	Delray Beach	Delray Beach Open	H	32	$556,010	$622,675
9	Feb 26	Acapulco [7]	Abierto Mexicano Telcel presentado por HSBC	H	32	$1,642,795	$1,789,445
	Feb 26	Dubai [7]	Dubai Duty Free Tennis Championships	H	32	$2,623,485	$3,057,135
	Feb 26	São Paulo	Brasil Open	ICL	28	$516,205	$582,870
10	Mar 8	Indian Wells [5]	BNP Paribas Open	H	96	$7,972,535	$8,909,960
11							
12	Mar 21	Miami [4]	Miami Open presented by Itaú	H	96	$7,972,535	$8,909,960
13							
14	Apr 6		Davis Cup Quarter-finals*				
15	Apr 9	Marrakech	Grand Prix Hassan II	CL	32	€ 501,345	€ 561,345
	Apr 9	Houston	Fayez Sarofim & Co. U.S. Men's Clay Court Championship	CL	28	$557,050	$623,710
16	Apr 15	Monte-Carlo [1]	Rolex Monte-Carlo Masters	CL	56	€ 4,872,105	€ 5,238,735
17	Apr 23	Barcelona	Barcelona Open Banc Sabadell	CL	48	€ 2,510,900	€ 2,794,220
	Apr 23	Budapest	Gazprom Hungarian Open	CL	28	€ 501,345	€ 561,345
18	Apr 30	Estoril	Millennium Estoril Open	CL	28	€ 501,345	€ 561,345
	Apr 30	Munich	BMW Open by FWU	CL	28	€ 501,345	€ 561,345
	Apr 30	Istanbul	TEB BNP Paribas Istanbul Open	CL	28	€ 426,145	€ 486,145
19	May 6	Madrid [1]	Mutua Madrid Open	CL	56	€ 6,200,860	€ 7,190,930
20	May 13	Rome [1]	Internazionali BNL d'Italia	CL	56	€ 4,872,105	€ 5,444,985
21	May 20	Geneva [1, 7]	Banque Eric Sturdza Geneva Open	CL	28	€ 501,345	€ 561,345
	May 20	Lyon [1, 7]	Open Parc Auvergne-Rhône-Alpes Lyon	CL	28	€ 501,345	€ 561,345
22	May 27	Paris [1]	Roland Garros*	CL	128		
23							
24	Jun 11	Stuttgart	MercedesCup	G	28	€ 656,015	€ 729,340
	Jun 11	's-Hertogenbosch	Libema Open	G	28	€ 612,755	€ 686,080
25	Jun 18	Halle	Gerry Weber Open	G	32	€ 1,983,595	€ 2,116,915
	Jun 18	London	Fever-Tree Championships	G	32	€ 1,983,595	€ 2,116,915
26	Jun 24	Antalya [1, 7]	Turkish Airlines Open Antalya	G	28	€ 426,145	€ 486,145
	Jun 25	Eastbourne [7]	Nature Valley International	G	28	€ 661,085	€ 721,085
27	Jul 2	London	Wimbledon*	G	128		
28							
29	Jul 16	Båstad	SkiStar Swedish Open	CL	28	€ 501,345	€ 561,345
	Jul 16	Umag	Plava Laguna Croatia Open Umag	CL	28	€ 501,345	€ 561,345
	Jul 16	Newport	Dell Technologies Hall of Fame Open	G	28	$557,050	$623,710
30	Jul 23	Hamburg	German Tennis Championships 2018	CL	32	€ 1,619,935	€ 1,753,255
	Jul 23	Atlanta	BB&T Atlanta Open	H	28	$668,460	$748,450
	Jul 23	Gstaad	J. Safra Sarasin Swiss Open Gstaad	CL	28	€ 501,345	€ 561,345
31	Jul 30	Washington D.C.	Citi Open	H	48	$1,890,165	$2,146,815
	Jul 30	Los Cabos [7]	Abierto Mexicano de Tenis Mifel presentado por Cinemex	H	28	$715,455	$808,770
	Jul 30	Kitzbühel [7]	Generali Open	CL	28	€ 501,345	€ 561,345
32	Aug 6	Toronto	Rogers Cup	H	56	$5,315,025	$5,939,970
33	Aug 12	Cincinnati [1]	Western & Southern Open	H	56	$5,669,360	$6,335,970
34	Aug 19	Winston-Salem [1, 7]	Winston-Salem Open	H	48	$691,415	$778,070
35	Aug 27	New York	US Open*	H	128		
36							
37	Sep 14		Davis Cup Semi-finals*				
38	Sep 17	St. Petersburg	St. Petersburg Open	IH	28	$1,084,450	$1,151,110
	Sep 17	Metz	Moselle Open	IH	28	€ 501,345	€ 561,345
39	Sep 24	Chengdu	Chengdu Open	H	28	$1,070,040	$1,183,360
	Sep 24	Shenzhen	Shenzhen Open	H	28	$733,655	$800,320
40	Oct 1	Beijing	China Open	H	32	$3,401,860	$4,658,510
	Oct 1	Tokyo	Rakuten Japan Open Tennis Championships	IH	32	$1,781,930	$1,928,580
41	Oct 7	Shanghai [1]	Rolex Shanghai Masters	H	56	$7,086,700	$9,219,970
42	Oct 15	Moscow	VTB Kremlin Cup	IH	28	$856,445	$936,435
	Oct 15	Antwerp	European Open	IH	28	€ 612,755	€ 686,080
	Oct 15	Stockholm	Intrum Stockholm Open	IH	28	€ 612,755	€ 686,080
43	Oct 22	Vienna	Erste Bank Open 500	IH	32	€ 2,198,250	€ 2,788,570
	Oct 22	Basel	Swiss Indoors Basel	IH	32	€ 1,984,420	€ 2,442,740
44	Oct 29	Paris	Rolex Paris Masters	IH	48	€ 4,872,105	€ 5,444,985
45	Nov 6	Milan [3, 7]	Next Gen ATP Finals	IH	8	$1,335,000	
46	Nov 11	London [1]	Nitto ATP Finals	IH	8	$8,500,000	
47	Nov 23		Davis Cup Final*				

ATP World Tour Masters 1000 | ATP World Tour 500 | ATP World Tour 250 | Next Gen ATP Finals

Nitto ATP Finals | Grand Slams | Davis Cup

CL = Clay court G = Grass court H = Hard court ICL = Indoor Clay court IH = Indoor Hard

[1] Sunday start [3] Tuesday start [4] Wednesday start [5] Thursday start [6] Saturday start [7] Saturday final

*Grand Slams, Olympic Games and Davis Cup are not ATP events. **Total Financial commitment is the tournament's investment in the event, including ATP sanction and marketing fees, on-site prize money and bonus pool contributions.

As of May 30, 2018

APPENDIX B: IRB EXEMPTION FORM

IRB EXEMPT APPROVAL

IRB #: 17409
IRB application title: The Upside of Downtime: Leisure-time Experience in Professional Tennis

Date: 12/14/2016

Thank you for submitting the completed IRB application form and related materials. Your application was reviewed by the UIUC Office for the Protection of Research Subjects (OPRS). OPRS has determined that the research activities described in this application meet the criteria for exemption at 45CFR46.101(b)(2). This message serves to supply OPRS approval for your IRB application.

Please contact OPRS if you plan to modify your project (change procedures, populations, consent letters, etc.), otherwise you may conduct the human subjects research as approved for a period of five years. Exempt protocols will be closed and archived at the time of expiration. Researchers will be required to contact our office if the study will continue beyond five years.

We appreciate your conscientious adherence to the requirements of human subjects research. If you have any questions about the IRBprocess, or if you need assistance at any time, please feel free to contact me at OPRS, or visit our website at http://oprs.research.illinois.edu

Sincerely,

Dustin

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APPENDIX C: IRB CONSENT FORM

University of Illinois at Urbana-Champaign

Participant Consent Form

Project Title

The Upside of Downtime: Leisure-time Experience in Professional Tennis

Researchers

Synthia Sydnor, PhD, Associate Professor, Department of Kinesiology and Community Health, (217) 333-3877, syndy@illinois.edu

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Purpose and Objectives of the Research

We will be using professional tennis tournaments and off-season training camps to collect a data set to look at athletes' daily leisure-time experience while competing on the tennis tour. From this entry point into examining the psychological detachment or *switch-off* experiences from tennis related demands through daily leisure-time routines, we hope to make connections to positive affective states and improved athletic performance and well-being among professional tennis players.

Procedures

- Participants will be asked to complete the appended survey/questions, which will be asked orally in an interview format. Completion of each survey will take less than 30min, anytime between its administration and a convenient time for the participant.
- Participants must be at least 18 years of age to participate.
- Feel free to ask any questions regarding the procedures of the study or your role at any time.

Potential Risks

- There are no known or anticipated risks to you by participating in this research

Potential Benefits

- Participants might learn more about themselves and about their professional tennis tour experience by participating in this study. Participants might have a better understanding of how important leisure experience is while competing in the tour. Participants might realize that others have had similar experiences to theirs. Participants are likely to develop a more nuanced understanding of tennis culture and increase their overall cultural sensitivity and awareness.

University of Illinois at Urbana-Champaign
Institutional Review Board

Approved: 12-14-16
IRB #: 17409

Confidentiality

- Your participation in this study is confidential.
- Participants' names, and any other identifying data will be removed from the surveys, and any reports or publications. However, information related to your ethnicity, gender, age, and years played in the professional tennis tour will be retained.

Will my study-related information be kept confidential?
Yes, but not always. In general, we will not tell anyone any information about you. When this research is discussed or published, no one will know that you were in the study. However, laws and university rules might require us to disclose information about you. For example, if required by laws or University Policy, study information which identifies you and the consent form signed by you may be seen or copied by the following people or groups:

- The university committee and office that reviews and approves research studies, the Institutional Review Board (IRB) and Office for Protection of Research Subjects;
- University and state auditors, and Departments of the university responsible for oversight of research;

Storage of Data

- Data will be stored in a password protected computer in the researchers' office. After six years, electronic data will be deleted and any paper records will be shredded.

Right to Withdraw

- Your participation is voluntary. You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort.
- Should you wish to withdraw, you may do so at any time during the study by contacting the primary researcher. Your data will be destroyed upon withdrawal from the study. Your right to withdraw data from the study will apply until results have been disseminated. After this it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw your data.

Follow up

- You will be provided with a summary of results to comment on, should you choose to.

Questions or Concerns

- Contact the researchers using the information at the top of page 1.
- This project has been approved on ethical grounds by the University of Illinois Institutional Review Board. If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the University of Illinois Institutional Review Board at 217-333-2670 or via email at irb@illinois.edu."

Consent

Your participation in this survey indicates that you have read and understand the description provided; you have had an opportunity to ask questions and your questions have been answered. You consent to participate in the research project.

Feel free to keep a copy of this consent form for your records

APPENDIX D: INTERVIEW PROCEDURE AND QUESTIONS

University of Illinois at Urbana-Champaign

Interview Procedure and Sample Questions

Project Title

The Upside of Downtime: Leisure-time Experiences in Professional Tennis

Interview Procedure & Questions

Introduction: purpose of the study, ethics, confidentiality, duration, and review of the consent form

- Tell me a little about yourself and your professional tennis career.
- Why do you play professional tennis? Career goals?
- How long do you expect to continue playing, and why?
- What do you like about the tour?
- Please list everything you can think of when you hear the word ***tennis***.

Demands and challenges while competing in the tour

- What are the challenges of playing the professional tennis tour?
- Please list stressors, challenges, and/or demands you have experienced in a daily basis while competing on the tour.

Early round loss, daily routine, recovery, work-life balance, quality of life, and leisure-time experience

- Tell me about your daily routine for match and non-match practice/training day.
- What is it like to lose early in the tournament (like before Wednesday)? How bad is it?
- What would be a typical routine for the time/days between early loss and first match of the following tournament? Did your routine change throughout your career? When?
- Do you have hobbies you enjoy while on the tour? Do you feel refreshed after doing your hobbies? Relation to performance?
- What would be a good/bad examples of spending leisure-time on the tour?
- Are (were) you satisfied with your life on the tour/professional tennis career?
-

Cultural influences on tennis career

- Do you think your cultural background and experience influenced your training-recovery

schedule and discipline?

- Do you think someone from a particular continent/route/nationality has an easier/more difficult time in pursuing a tennis career? Why/why not?
- Please list any cultural and environmental difficulties/grinds of being a professional athlete on tennis circuit.

Any other questions/comments/thoughts you think we should discuss?

Follow up with questionnaires (online/hard copy)?