AN ANALYSIS OF OLYMPIC GOLD MEDALIST MALE SWIMMERS' COMPETITION-DAY ROUTINE

by

MATTHEW ALLEN GRANT

(Under the Direction of Paul G. Schempp)

ABSTRACT

The purpose of this study was to identify the actions Olympic medalist male swimmers undertake on a competition day that they believe are critical to their success. The secondary purpose was to understand the meaning these athletes gave to these actions.Utilizing constructivist grounded theory the present study identified critical attributes, purposes and by-products and proffered a substantive theory of a competition-day routine of Olympic gold medalist male swimmers.

Five Olympic gold medalist male swimmers from the 2008 Beijing Summer Olympic Games participated in a three-stage data collection: a) an initial interview, b) a competition observation at an elite meet, and c) a follow-up interview. Additionally, each of the participant's coaches were interviewed regarding the swimmer's actions at competition. All interviews were semi-structured and digitally recorded. Interview transcriptions and expanded field notes were analyzed for emergent themes. Field notes from observations provided confirmatory data regarding competition-day activities. Method and data triangulation provided trustworthiness.

Constructivist grounded theory coding and analysis strategies were used to analyze data (Charmaz, 2006). Themes were divided into attributes, purposes, and by-products of a competition-day routine. Five attributes emerged: (a) flexibility, (b) adaptation, (c) automaticity,

(d) time management, and (e) skill acquisition. Each attribute was significant as an individual characteristic and when interacting together. Comfort and focus were the purposes behind the use of a competition-day routine. The by-products of the participant's routine were enjoyment, excitement and fun.

INDEX WORDS: routine, grounded theory, Olympic athlete, competition, expertise, automaticity, adaptation, flexibility, skill acquisition

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MATTHEW ALLEN GRANT

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MATTHEW ALLEN GRANT

Major Professor: Paul G. Schempp

Committee: Bryan McCullick
Kathy Roulston

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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DEDICATION

To my wife, Danielle, and my family for all the prayers, support and encouragement.

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CHAPTER 1

INTRODUCTION

At the 2008 Olympic Summer Games in Beijing, China, the difference between a gold medal and silver medal in the men's 100 butterfly was decided by .01 of a second. The difference between the top two swimmers' performances and the color of medal was determined by how each of the swimmers finished the race: one was too long into the wall while the other needed to take a short stroke for his final touch. Both the commentators and the swimmers themselves said they were both poor finishes. The difference between the swimmers in this singular case seemed rather small until one realized that the winner would tally a total of eight gold medals in this nine-day meet while the other missed his only chance at an Olympic gold medal. If a coach understood what accounts for the disparity between elite and sub-elite athletes, then training and meet preparation could be honed to improve the most important factors for success at elite meets. To this end, researchers have investigated the development of elite athletes and the actions of athletes during competitions.

Development of Elite Athletes

The development of elite athletes came to the forefront of sports psychology researchers in the late 1990's. In 1999, Jean Cote presented a developmental model of elite athletes. Cote used open-ended interviews of the athletes and parents in four families that contain an elite athlete in order to investigate the influence of families on the development of elite athletes. Based on Ericsson, Krampe, and Tesche-Romer (1993) and Bloom (1985), Cote described three stages of elite athletic development: sampling years, specialization years, and investment years.

The sampling years (Bloom's early years) occurred before the age of 12. Athletes sought activities that allowed them to have fun and interact with friends. The parents facilitated the activities by signing their child up for sports, making sure their child was at practice and competition, and noticing whether their child had a "gift" for the sport. Between the ages of 13 and 15, the athlete entered the specialization stage (Bloom's middle years). The hallmark of the specialization years was the self-initiated limiting of activities by the athlete. Parents increased their financial and time commitments along with their emphasis on excellence in both sport and school. The investment years (Bloom's later years) occurred when the athlete decided on the one sport in which he/she would spend significant amounts of time in practice and competition. The parental role was that of supporter in finances and support when fighting set-backs. Parental influence did not diminish even though they did not have as direct an influence in the progress of practices and competition.

Cote's (1999) work developed stages that could, "form a useful framework for researchers studying family influence on youth sport participation and the development of expertise in sport" (pg. 413). This manuscript spurred on numerous studies that extend Cote's work in the development of expert athletes. Johnson, Tenenbaum, Edmonds and Castillo (2008) conducted one such study.

Johnson, Tenenbaum, Edmonds and Castillo (2008) sought to differentiate elite and sub-elite athletes by their progression through stages of development and amount of deliberate practice. Using Bloom (1985) and Cote (1999) along with Hendry and Kleop (2002), seven elite and eight sub-elite swimmers were interviewed regarding their development. This included questions about their milestones, hours of practice, years of competitive swimming and age when deciding to become an elite swimmer. Additionally, researchers tested the systemic interaction

of self-efficacy, social resources, structural resources, skills and biological disposition in accordance with the Lifespan Model of Development Challenges (LMDC). The results showed no discernible difference between the physical training regimen, longitudinal experiences, environmental interactions, and personal factors during the development of elite and sub-elite athletes. Some of the psychological characteristics associated with elite performers such as high levels of motivation and focus could be found in both the elite and sub-elite athletes.

As a result, Johnson, Tenenbaum, Edmonds and Castillo (2008) suggested that future studies investigate the same characteristics within an "ecologically valid domain [or during] ... world class competitions" (pg. 472). In other words, researchers should begin identifying what athletes did during the days of an elite competition. The major hurdle to examining athletes in this way was that the popular reductionist methods of sport psychology did not allow for investigation during competition (Johnson et al., 2008). Even though there was some interest in studying elite athletes during world class matches or meets, there was a very limited number of studies devoted to this topic.

Elite Athletes during Competition

Over the last decade, only three studies were located in which athletes were observed during competition. In all of these studies, course-of-action theory and self-confrontation interviews were used in order to find the structure or organization of the actions during competition. Course-of-action theory, which formed the foundation for analysis, stated that action and situation were inextricably linked. If confronted by their actions, in this case using a videotape of their movements within a sport competition, the actor could state the meaning and intentions of those actions within the culture or environment (Hauw, Berthelot, & Durand, 2003). Through this type of analysis, the psychological processes employed and meaning given to these

actions were revealed and could be studied. One method used in these studies was self-confrontation interviews. In this type of method, the actions of the participant, as captured on video during a competition, were used to prompt responses. During the retrospective viewing of the video, questions such as "what were you trying to do?," "what made you do that?," and "what draws your attention?" were asked to the athletes (Hauw, Berthelot, & Durand, 2003, pp. 304). The transcript of this interview was then analyzed. The combination of this theory and methodology led each study to discover the organization of the athlete's actions.

In 2003, Hauw, Berthelot, and Durand conducted the first of two studies of elite trampolinists during elite competition using course-of-action theory. Four male expert trampolinists were videotaped only during their performance. Results showed a structure to the participants' performances: (a) initiating straight jumps to get into position, (b) performing controlled moves, (c) recovering the routine by performing moves, and (d) highlighting move execution. Each of these was an archetypal series of actions that were further delineated into smaller movement patterns. These results demonstrated a format of activity that was unique and typical of trampolinists and could inform better practice procedures for the psychological preparation of an athlete for competition.

In 2005, Hauw and Durand expanded their study of trampolinist from the actions strictly during a performance to the movements of the athletes during the whole of the competition. This was the only study located that specifically investigated the competition-day routine of elite athletes. In this study, researchers observed seven elite trampolinists' activities during the day of five world-cup and pre-Olympic trials elite meets. More specifically, athletes' were videotaped between 25 to 58 minutes in length, for both preliminaries and finals, at the venue of the competition. Using the course-of-action theory and self-confrontation interviews, described

above, five macro-series of exploration, warm-up, holding back, internalization, and relaxation were described using the two macro-sequences of the athlete's trial performance during his routine and actual performance. The results described a standard competitive format of activity used by the trampolinist on the day of his competition. Although this study provided "an accurate description of situated activity," this investigation did not supply deep descriptions, task acquisitions, or routine purposes. Therefore, future studies were encouraged to gain "greater insight into how elite athletes perform in situations where one's personal best is called for at a particular moment" (pp. 214-215).

In 2006, Seve, Poizat, Saury & Durand studied six elite table tennis players during both national and international competition. Similar to Hauw, Berthelot, and Durand (2003), the researchers were interested in the activity of the players solely during their match. The same underlying theory and similar methods of the other studies were employed with one exception: this study used a grounded theory approach to data analysis. Data were processed using generated logs of the matches, labeling of elementary units of meaning, determining meaningful structures in the course of action, and constructing a grounded theory of activity during the performance. The results demonstrated the use of exploration of the opponents' skills, execution of strategy based on those skills, and deception strategies employed during play.

In the studies described in this section, similar theoretical frameworks and methods were used to investigate the actions during the performance and during the day of competition, respectively. The focus was to understand what the athletes were thinking in order to create an organization of activity based on the coupling of their action and cognitive function. In all three cases, a framework of actions by the athletes described the typical routine of elite athletes within the sports of trampoline and table tennis. Interestingly, it could be argued that none of the

studies were conducted during and with elite athletes or at elite competition, but rather, by successful athletes in competition. Therefore, as suggested by the authors, future research should look at elite athletes in competition where they must be at their best to accomplish their goals.

Summary

As described in this review of literature, researchers found no significant difference in the longitudinal training of elite and sub-elite athletes. The athletes develop through the similar stages, train similar hours, and decide to be elite and reach their milestones. Since one cannot use training to differentiate the caliber of athlete performance, researchers suggested studying athletes during competition. Three studies in the last decade have investigated the actions of elite athletes during competition and performance. The theoretical framework and methods were similar as was the scope of investigation: to determine and describe the actions of the athletes within an organization or framework of activity. These studies demonstrate the interest of the field in conducting research during competition and the need for this examination to occur when the athletes must perform at their best to accomplish their goals. To further the work of the research described above, a study that examined not only what elite athletes do during an elite competition but the reasons why those actions are important would add to the knowledge of the field of sports studies.

Purpose of the Study

Therefore, the purpose of this study was to identify the action Olympic medalist male swimmers undertake on a competition-day that they believe is critical to their success. The secondary purpose was to understand the meaning these athletes gave to these actions. Through a constructivist grounded theory approach (Charmaz, 2006), this study created a substantive

theory regarding these critical actions and their meaning for elite performers. To this end, this study addressed the following questions:

1. What behavioral routines did Olympic medalist swimmers perform on the day of a major competition?
2. Which of these behaviors did Olympic medalist swimmers believe was necessary for their success?
3. What was the underlying meaning of these behaviors for the Olympic medalist swimmers?

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this study was to investigate the actions taken by Olympic gold medalist male swimmers during an elite competition in preparation for performance. Using grounded theory, the current study provides a descriptive grounded theory regarding this competition-day routine and its meaning for these elite athletes. The purpose of this chapter was to provide a review of literature pertinent to the routines of Olympic champions.

There were several areas of scholarship that pertained to the research question. First, the premise of this study was to better understand the actions and the meanings of male swimmers on an elite competition day. The major focus of this study was the competition-day routine of these participants. A routine was defined as the pattern of actions (Cohen et al., 1996). A competition-day was defined as beginning from the time the participant woke up until the time they performed on a day of an elite meet. Therefore, a review of organizational-routine, developmental-routine and sport-routine literature was examined.

Second, the participants in this study were Olympic gold medalist swimmers. The participant sample, consequently, had three main characteristics. These men were Olympians, athletes and experts in their sport. Considering these attributes of these male athletes, this chapter will also review the literature on Olympic athletes and expertise theory.

Organizational Routine Literature

The most expansive source of research on routines was within organizational-routine literature. Since 1940, routines with organizations have been investigated in such diverse settings as politics (Stene, 1940; Merton, 1940; Weber, 1947; Sleznick, 1949; Gouldner, 1954;

Blau, 1955), economics (Nelson & Winter, 1973, 1982), management (Feldman, 1988; Feldman and Rafaeli, 2002; Cohen & Bacdayan, 1994), and education (Conley & Enomoto, 2005). Despite the diverse areas in which routines were scrutinized, there remained basic tenets of organizational routines that continued to evolve as more research weighed in on the manner in which routines affect organizations. Therefore, the first part of this section delved into the development of current understandings on organizational routines. This culminated in providing a current organization routine that seems the most comprehensive and relevant to the present study.

The following section presented the current understanding of organizational routines. This examination included the theories, characteristics and effects of routines on human organizations. Second, the literature on family routines and rituals will be reviewed. Beginning with literature examining routines and rituals in the larger context of community, this investigation will detail the literature of community, family and educational routines as they pertain to the development of the youth.

Organizational Routines

Becker (2004) provided an extensive review of literature on organizational routines. The purpose of this manuscript was to describe the hallmarks of organizational routines as well as effects routines have on organizations. Eight characteristics of organizational routines were discussed: (a) mindlessness versus effortful accomplishment, (b) patterns, (c) recurrence, (d) collective nature, (e) processual nature, (f) context-dependence, embedded, and specificity, (g) path dependence, and (h) triggered. Additionally, routines were presented as affecting organizations by providing coordination and control, truces, economy of cognitive resources,

reduction of uncertainty, stability, and a storage of knowledge. Each characteristic and effect was presented within two distinct and significant methodological perspectives.

Becker (2004) took great effort to present his treatment of organizational routines from two distinct standpoints: the conceptual and the empirical. This seemingly divergent manner of discussing the characteristics and known impact on organizations was due to the historical, mythological development of this field of study. The first studies of routines in organizations were conceptual. For example, early economic studies on organizations and change ran simulations of organizational-routine assumptions in order to further understanding within this field. A second phase of inquiry followed, mainly in the past twenty years, in which the theory of organizational routines was used in field investigations of real firms. The distinction, then, of which literature asserted specific characteristics, was important to note because there was some disagreement. These differences changed the nature of routines as a result of the contrasting methodologies. Although the dispute was only within one of the eight characteristics discussed by Becker (2004), at a more theoretical level, pointed to greater differences in the assumptions produced by this disagreement. This theoretical discord has created factions within the field of organizational routine based upon the scholars' beliefs as to the functioning of routines, the role of people within routines and the cognitive processing used in performing the necessary tasks within a routine. Therefore, it was important for Becker (2004), and the present study, to articulate these theoretical perspectives before defining the characteristics and effects of routines with an organization.

Organizational Routine Theoretical Perspectives

As stated above, Becker (2004) discussed all characteristics of organizational routines, first, from a conceptual standpoint and, second, from an empirical point of view. The reason for

this distinction comes from the historical and methodological nature of organizational routine literature. The study of organizational routines began with conceptual studies within such domains as politics and economics (Stene, 1940, Nelson & Winter, 1973). In the earliest studies, no formal theory existed as to the manner in which organizations operated. To understand the interworking of political organizations, social theory was applied to political writings (Merton, 1940; Weber, 1947; Sleznick, 1949; Gouldner, 1954; Blau, 1955 as cited in Feldman & Pentland, 2003). The result of these inquiries was a conceptual theory in which routines were characterized as inflexible, stable, mindless, bureaucratic and a provider of inertia. In other words, routines were seen as continual and regular actions that provided accountability, political protection, expertise and power due to their repetitive, identical enactments (Feldman and Pentland, 2003). These types of routines were enacted in the exact same manner without conscious thought or cognitive resources (Becker, 2004). Besides political conceptualization of organization routine, economics also added to this literature.

Inquiries into the effect of economics and change on a firm or organization pushed the field forward as well. In their seminal work, *An Evolutionary Theory of Economic Change*, Nelson and Winter (1982) produced a book based upon their conceptual work in economics, change and evolutionary theory, Nelson and Winter (1972). In this influential and initial article into evolutionary theory within economics, Nelson and Winter (1972) applied the understood organizational routine theory to economics in order to understand change. This conceptual manuscript did not investigate actual economic firms, but, in accordance with the methodology within the field at that time, ran simulations in order to test the assumptions of firm operation, change based on economic fluctuation, “local” or “incremental” search for new techniques, and dynamic selection of new techniques (pp. 441-442). These assumptions were based heavily on

the then current beliefs on how organizations operated. After running one hundred simulations, a new “evolutionary theory” provided a new line of inquiry culminating in their seminal work, Nelson and Winter (1982). Instead of observing an actual economic firm and describing how routines worked within that setting for economic change, this literature, based on the findings from the political-organizational routine literature, made assumptions that were tested in abstraction.

The impact of this conceptual literature on academia was the creation of a theory of organizational routines. As stated above, scholars examined documents of political parties or ran economic simulations resulting in routines being characterized as inflexible, stable, mindless, bureaucratic, and providing inertia. These assumptions depicted routines as being continually enacted in exactly the same manner and, more importantly, limited the agency of individuals (Feldman & Pentland, 2003). These suppositions, as well as the nature of the routines, i.e., inflexible, mindless, and lacking agency, were disputed when scholars applied this traditional organizational-routine theory to actual firms.

Following the establishment of a conceptual organizational-routine theory, researchers began to conduct empirical research into organizational routines. In these studies, data were collected from actual firms and analyzed in order to discover how specific types of routines affected the organization and its goals (Becker, 2004). For instance, Perren and Grant (2000) examined the evolution of management-accounting routines by analyzing the interviews and documentation from a reseller of accountancy systems, an advertising agency, sports shops, and a human resource consultant. Through the use of Berger and Luckmann’s (1967) social construction, the results demonstrated the importance of agency and flexibility within this micro-

world of management (Perren & Grant, 2000). These results stood in direct conflict with the inflexible and mindless nature of agency presented in the conceptual literature.

In other examples, this empirical type of examination moved outside the institutions of politics or economics. Edmondson, Bohmer, and Pisano (2001) analyzed qualitative data from sixteen hospitals of "varying size, location, history, and academic status" regarding the reinforcement of existing organizational routines by new technology and organizational contexts. The authors concluded that team leaders were more influential in the acceptance of new technology within the organization than the senior management, while face-to-face interactions satiated fears when new technology threatened old routines.

The agency of participants and the effortful accomplishment were shown as powerful factors for change. Within education, the roles and routines of science classes and classroom practices (Ford & Wargo, 2007), routines and collective orientations of math teacher development (Gellert, 2008), and stability and change within educational organizations (Coley & Enomoto, 2005) were empirical studies on routines within an organizational context. For example, in Gellert (2008), routines were conceptualized on three levels: (a) an individual's ability to coordinate and effectively teach within the classroom context, (b) a skill for an individual's actions, and (c) the capabilities of organization's learned responses to selective pressures, i.e., the collective expectations of the school. The findings pointed to the necessary agency of the teacher to pursue and produce new learning routines that were most effective and supported by the school.

In all of these examples, the empirical studies analyzed data from actual sources and detailed how routines worked in the field. The findings contradicted the assumptions of traditional organizational routine literature. Whereas the conceptual literature, based originally

on bureaucratic documents within political organizations and economic simulations, characterized routines as inflexible, mindless, stable, bureaucratic and providing inertia, empirical studies found routines to be flexible, effortful, and a product of agency. Two camps within the academic field formed and debated the hallmarks of organizational routines (Feldman & Pentland, 2003). Although the divisions between the conceptual and empirical were drawn in bold lines, both groups of scholarship had data and evidence that lent support for their findings. The question, then, was not proving whether one assumption, e.g., flexible, was correct and the opposing sentiment, inflexible, was incorrect, but, was a middle ground that included the suppositions of both the conceptual and empirical possible? Feldman and Pentland (2003) said "Yes" and effectively described a new theory that incorporates most of the assumptions of both factions into one seamless theory of organizational routine theory.

Feldman and Pentland's Organizational Routine Theory

Feldman and Pentland (2003) proffered a new organizational routine theory that accounted for most of these characteristics and provided a more encompassing theory. In this article, the authors first described the conceptual understanding of routines through the use of three metaphors. First, Stene (1940), Simon (1945), and Nelson and Winter (1982) compared routines with individual habits. In this sense, the organization was a human and routines were automatic to the needs of the physical body. Second, March and Simon (1958); Cyert and March (1963); Carley (1996); Carley and Lin (1997); and Levitt, Thomson, Christiansen, and Kunz (1999) likened routines to programs, heuristics or scripts. Individuals within the organization followed the standard operating procedures in order to complete tasks. There was more decision making by the individuals than the habit metaphor; however, the significant decisions were made

in advance by superiors. Finally, Nelson and Winter (1982) viewed routines as genes. Within this metaphor, the genes determined the possible behaviors of the organism or organization.

Following this explanation of the traditional view of organizational routines, Feldman and Pentland (2003) criticized the specific aspects of the conceptual organizational routine theory based on its lack of emphasis on agency, the contention of inflexibility of routines, and the mindless nature of tasks within a routine. These critiques did not completely discount these three concepts as delineated by the conceptual literature, but examined the weaknesses in light of more current empirical research.

First, the traditional view limited the role of humans or agency. In agreement with Emirbayers and Mische (1998), the authors argued that agency within a routine allowed individuals to reflect through social interactions. Accordingly, then, agency was void in the traditional views of organizational routine theory because actions were described as routinized in such a way that individuals lack both decision making autonomy and reflection upon tasks.

Second, according to Feldman and Pentland (2003) the traditional view of organizational routine theory inaccurately described routines as "inflexible." Based upon empirical studies, when individuals perform tasks within a routine, there was flexibility (Weiss & Ilgen, 1985; Ashforth & Fried, 1988; Cohen et al., 1996). The individuals acted close to the intention of the task within the routine, however, there was variety in the manner in which the person organized and acted.

Finally, the traditional "mindlessness" of routines was found to be faulty. Several studies had found that actions within a routine were more accurately described as "effortful accomplishments" because individuals constructed and performed routines from a variety of

possible actions (Pentland & Rueter, 1994; Feldman & Pentland, 2003, Cohen et al., 1996, Becker, 2004).

Due to these criticized areas of organizational routine theory, especially the lack of agency and flexibility, Feldman and Pentland (2000, 2003) proposed a new theory of organizational routine. This new theory did not discount all the assumptions of the traditional view for a more modern version, but, instead, Feldman and Pentland (2003) combined some of the suppositions for both conceptual and empirical literature, such as the inflexible and flexible and the mindless and effortful, into a new theory that also pointed to the importance and necessity of agency within routines.

Using Latour's (1986) idea of ostensive and performative aspects of power within associations, Feldman and Pentland (2003) incorporate these terms in order to address agency, effort and flexibility in routines. The ostensive aspects of routine were those tasks that must be accomplished as mandated by organizational guidelines. The example provided in Feldman and Pentland's (2003) manuscript was the hiring practices within an organization. In the hiring practices of an academic institution, there were many steps that must be followed to ensure transparency and legitimacy in the employment of a professor. The institution decided what position was needed, published a call for applications, reviewed the applications, selected individuals for interviewing, interviewed applicants, selected interviewees for hiring, hired the individual and negotiated the terms of the contract. These steps, and the forms that must be used and signed, e.g., the application and contract, were the ostensive aspect of the hiring routine. These ostensive aspects closely followed the nature of routines described in the conceptual literature. These facets seemed legal in nature, like the traditional literature that investigated the bureaucratic documents of political parties. They were inflexible and, in a sense, lacked agency

because (a) there was no variance in the way the tasks were performed and (b) the decision to take these necessary steps were decided by higher administrators and their policies.

The performative aspects of routine were those tasks performed as directed by the individuals participating in the actions prescribed by the ostensive aspects of the routine. The performative were characterized as flexible and depended upon the agents involved to make decisions based upon the time, place, and person involved. Returning to Feldman and Pentland's example of hiring practices, one of the ostensive tasks stated was that an interview must be conducted of selected interviewees. However, what would happen if one of the interviewees was impeded by a snowstorm on the way to the on-campus interview? In this situation, the interviewee could not participate in an on-campus interview, as prescribed by the ostensive aspects of the hiring practices. Therefore, the ostensive nature of the tasks was not followed strictly. The individuals on the hiring committee must decide, due to this unforeseen obstacle, what type of equivalent action must be implemented to satisfy the ostensive parts of the routine while attending to the actual situation with the particular interviewee. The committee sought alternative, acceptable practices according to policy and decided to conduct the interview via teleconference. The ostensive aspect of the routine was fulfilled, that is the person was interviewed, but the agency and flexibility of the performative aspect of the routine allowed for the completion of the interview task via teleconference. Moreover, as demonstrated in this example, there was a reciprocal relationship between the ostensive and performative aspects of the routine. Whereas the ostensive facets prescribed specific tasks to be complete and the acceptable manner for completing those tasks, the performative features provided new ways to accomplish the actions through the improvisations of the actions. When a new action was taken to complete the interview, the routine was inculcated with a new permissible type of interview; a

new ostensive aspect of teleconferences in that organization within the hiring practices was formed.

Whereas Feldman and Pentland's (2003) theory combines the inflexibility and flexibility of the conceptual and empirical, respectively, as well as adding the role of agency with the more traditional assumptions of routine, the nature of cognition was described firmly within the empirical literature. Even though this theory is the most inclusive theory, the debate over the "mindlessness" or "effortful accomplishment" of routines within organizations continued to be a major division that separated the field (Becker, 2004). Starting with this contentious aspect, the remaining two parts of this section of organizational routine will present all the characteristics of organizational routines and their effects.

Characteristics of organizational routines. Becker (2004) delineated eight characteristics of organizational routines: (a) mindlessness versus effortful accomplishment, (b) patterns, (c) recurrence, (d) collective nature, (e) processual nature, (f) context-dependence, embedded, and specificity, (g) path dependence, and (h) triggered. Each of these hallmarks of routines will now be discussed.

Mindlessness versus effortful accomplishment. As stated above, the first characteristic described did not find harmony between the conceptual and empirical literature. The more traditional, conceptual studies found routines to be mindless, repetitive actions that are stable because individuals did not consciously think about their tasks (Feldman & Pentland, 2003, Becker, 2004). The decisions, tasks and progression of action were decided and created by higher levels of administration. Additionally, the individuals in the political firms or economic institutions were bound to complete tasks in the exact same manner every time. The empirical, contemporary inquiries, in contrast, found that persons, or agents, made decisions based upon the

needs of the organizations and procedures of the routine in order to complete their tasks (Becker, 2004). In the example of hiring practices described above, the committee in charge of hiring made many decisions as to how to carry out the prescribed actions needed to complete the routine of employing a new faculty member. This took great effort in order to accomplish the tasks of the routine. Although Becker (2004) presented this tension even-handedly, Feldman and Pentland (2003) made a convincing argument for effortful accomplishment and adapted that understanding within their theory of organizational routine. Unlike the other aspects of routines that found some agreement, this one characteristic stood as the only one with unresolved contention between the conceptual and empirical literature.

Patterns. All routines were characterized as patterns (Nelson & Winter, 1982; Heiner, 1983; Teece & Pisano, 1994; Cohen et al., 1996). These patterns were considered as either activities patterns, such as observable individual or collective behaviors, or cognitive patterns (Becker, 1994). Although both kinds of patterns are supported by the literature in different studies, the association of both types of patterns with routines has led to some confusion as well (Becker, 1994).

Recurrence. Routines must happen more than once. As Becker states plainly, "one would be hard pressed to call something happening only once a routine" (pp. 646). Although this seems intuitive, both the conceptual literature (Nelson & Winter, 1982) and empirical literature (Pentland, 1992) discussed this characteristic as necessary.

Collective nature. Besides being a pattern that reoccurs, routines had a collective nature. Organizational routines involved multiple actors or agents (Feldman & Pentland, 2003). This was an important conception as collectiveness meant that routines could involve persons from different locales as well as they can be distributed (Simon, 1992; Winter, 1994 as cited in

Becker, 1994). Although the people involved could be in separate departments or units, the organization became linked through interaction. This interaction or collective nature was interrupted if a participant in the routine acted more as an individual than a part of the collective whole (Beck, 2004; Weick, 1990). This characteristic had powerful implications for the balancing of individual habits and organizational routines to coexist.

Processual nature. Routines were described as a process. This processual nature helped researchers to understand and explain organizational and economic change. "The potential of the concept of routines to contribute to explaining change is based on the fact that routines are a unit of analysis that is processual in nature" (Becker, 2004, pp. 649). Due to the stabilizing nature of routines within an organization, by studying the changes to routines, researchers could map out the changes to the organization as a whole. In empirical research, changes such as time of impact, decay, reaction time, delays, time need for acquisition, frequency of repetition, and maintenance were processual characteristics studied for their significance and insight into the change of the organization (Becker, 2004).

Context-dependence, embedded, and specific. Routines were considered "embedded in an organization and its structures, and are specific to the context" (Becker, 2004, pp. 651). Context was found to be important because external structures, e.g., documentation, control, prompt, and synchronize individual actions, help to prompt, control and synchronize individual actions. General rules or procedures within an organization were embedded within different contexts depending on the department or work unit. Therefore, interpretation of knowing what routine to do when, power of replication, degree of inertia and search potential were significantly altered based upon context (Becker, 2004).

Specificity was described as historical, e.g., an action occurs at a certain time; local, e.g., routines arise from local learning process and are limited to those cultures; and relational, e.g., routines occur between people. Due to the interactions of routines within difference contexts and the specifies associated with those places, transferability could be difficult. A new situation could be incompatible or impossible to emulate. Organizations must take context, embeddedness and specificity into consideration when dealing with change in routines.

Path dependence. Routines were path dependent because they were based upon decisions and precedents created prior to the enactment of the routine (Becker, 2004). Since routines relied on previous action, change occurred through feedback regarding the outcomes of the routines. Additionally, the starting point of a new routine was demonstrated to be important because the organization may set a course of action that was not compatible wtih its goals. Therefore, the path dependence of routines emphasized the importance of feedback and the inception of a routine.

Triggers. Routines were prompted by either actor-related triggers or external cues. Actor-related triggers could be based upon a standard by which the person must perform. If the task performance needed was considered higher than that standard, the person might "follow satisfying rather than optimizing behavior" (p. 654). If the necessary action was perceived as below the standard, the person might be triggered to perform a remedial action. External cues were exemplified in budgeting (Becker, 2004). For instance, a request for budget approval following a marketing meeting sets the routine of the financial department in action. In both these situations, routines were shown to be enacted by triggers.

As described, there were eight characteristics of routines within organizations. Most of these were supported by both the conceptual and empirical literature. The only exception was

the “mindless” versus “effortful accomplishment” of the individuals performing tasks within the routines. In addition to depicting the characteristics, Becker (2004) also described the effects of routines on organizations. These effects will be presented in the final part of this section.

Effects of Routines on Organizations

Along with the characteristics of routines within organizations, Becker (2004) describes the effects of routines on organizations. Six effects were discussed: (a) coordination and control, (b) truces, (c) economizing on cognitive resources, (d) reducing uncertainty, (e) stability, and (f) storing knowledge. Each of these will be presented.

Coordination and control. Routines coordinated activities within an organization. The manner in which routines ordered organizations was far reaching.

> The coordination power of routines derives from several sources: from their capacity to support a high level of simultaneity (Grant, 1996); from giving regularity, unity and systematicity to practices of a group (Bourdieu, 1992); from making many simultaneous activities mutually consistent (March and Olsen, 1989); from providing each of the actors with knowledge of the behavior of the others on which to base her own decisions (Simon, 1947; cf. Stene, 1940); from providing instructions in the form of programs; and from establishing truces ... (Nelson & Winter, 1982) (Becker, 2004, pp. 654-655).

Additionally, as pointed out through empirical studies, routines might coordinate because it was easier to monitor and compare routinized actions rather than the non-routinized (Segelod, 1997). Regardless of the reasons behind this effect on organizations, the ability to use routines to coordinate action aided in positive performance and mediation of individual interactions.

Truces. Truces were a necessary part of routines within organizations. Nelson and Winter (1982 as cited by Becker, 2004) explained that truces, between those giving directions and those carrying out the directions, alleviated conflicts that might arise between the individual interests of the participants within a routine. For instance, research showed that there was a truce by which the one who was ordered to do something did not consciously question the directive based upon the agreement as to the amount of work that must get completed and the compensations if that level of productivity was reached (Benard, 1938, as cited by Becker, 2004). If it were not for these truces, then the routines and the organizations would not run smoothly. Truces also provide a way to understand stability and change within the organization (See "Stability" in this section).

Economizing on cognitive resources. Routines economized the decision making of agents based upon the limited resources of information available. Routinized actions required less cognition than non-routine activities. By providing a routine, the attention required to complete those tasks was reduced. The consideration required by the non-routine activities applied to those situations because the cognitive capacity of the individual was not completely used by the routinized tasks (Simon, 1947; Postrel & Rumelt, 1992; March & Shapira, 1987; Cyert & March, 1963; Winter, 1985; as cited by Becker, 2004). This allowed individuals to save mental efforts and preserved decision making and informational processing capacities. Finally, this economizing reduced the time needed for decision making and allowed for spontaneous reactions, even under constraining situations such as time (Betsch, Fiedler, and Brinkmann, 1998; Becker, 2004).

Reducing uncertainty. Uncertainty was normally coped with by an organization through the collection of additional information in order to speculate as to the outcome of a

decision. However, in some cases, such as pervasive uncertainty or "equivocality" (Daft & Lengel, 1986 as cited by Becker, 2004), more information would not provide an assessment as to whether a specific choice or outcome was better than another decision or result, respectively. In these pervasive cases, a routine aided in an agent's ability to make a decision because the "right" choice was determined by the mandates of the prescribed actions of the routine (Becker, 2004). Additionally, uncertainty became more predictable due to the governmental rules set through routines. This helped individuals cope with the most extreme versions of uncertainty when making a decision (Inam, 1997, 1999 as cited in Becker, 2004).

Stability. Routines supplied multiple levels of stability within an organization. First, routines normally recurred without change. One reason for their stability was that routines rarely change. The literature showed that a routines did not change (a) as long as they were perceived as effective and (b) because there was monetary cost when routines were changed (Becker, 2004). Due to these factors, there was rarely change to routines. Moreover, stability provided a baseline for assessing change, comparisons and learning (Langlois, 1992; Shapira, 1994).

Although stability was normally perceived as positive, pathologies resulted from this same stability within routines. These negative occurrences were not a consequence of lack of feedback when a routine was not providing effective results, but, were due to the recurring patterns by individuals when the feedback was ignored (Steinbruner, 1974).

Finally, stability provided insights into change. Change was shown to be an endogenous aspect to routines. By studying the inevitable incremental changes of routines, researchers could explain how routines adapted to novel change and how modifications to one routine could ultimately reshape the whole of the organization.

Storing knowledge. Routines were shown to be repositories of knowledge, specifically tacit knowledge, within organizations (Nelson & Winter, 1982; Becker, 2004). Unlike documents or correspondences, routines resulted from the successful decisions or solutions by management to adapt to situations. Routines themselves possessed institutional knowledge passed along in the instructions of how to complete tasks, but, beyond that, the agency of the individual choices in completing the task demonstrated "individually-held-knowledge-applied-in-the-firm" in its application (Becker, 2004). This knowledge, then, included both procedural and declarative knowledge.

Organizational Routine Literature Summary

In this section of routine literature, the theory, characteristics and effects of routines within organizations were presented. Theoretically, the literature was shaped by the results of both conceptual and empirical studies. Whereas conceptual research described organizational routines as inflexible, stable, mindless, and bureaucratic and a provider of inertia, the empirical literature presented the alternative characteristics of flexibility, effortful accomplishment and agency. One theory of organizational routines that encompassed most of these aspects was proffered by Feldman and Pentland (2003). This theory was the most comprehensive within the literature because it was based on almost the entire body of literature within the field. This theory purported two aspects of routines. The ostensive aspect related to more traditional views of routines in that these aspects are inflexible and decisions were made by administrators to those who carry out the tasks. In the latter facet, the ostensive could be described as mindless since decision making is reduced. The performative aspect of routines referred to the individuals, place and time in which the routine was acted out. In this aspect, the ostensive aspects are fulfilled through flexibility, effortful accomplishment and agency.

Along with the theory, the characteristics of and effects on organizations were depicted. According to Becker (2004), routines were described as either mindlessness (conceptual) or effortful accomplishment (empirical). Feldman and Pentland (2004) made a convincing case for the latter, which was the characteristic that was applied to the results of the present study. Also, routines were described as patterns that recur. They provided a collective, processual nature in which individuals interact and make decisions when following and completing procedures. Routines have an aspect of context-dependence, embeddedness, and specificity due to the different individual, departments or organizations in which they were enacted. Additionally, routines were shown to be path dependent and triggered by the actions of others within the organization.

Effects of routines on organizations included a provision of coordination of and control over actions of individuals within the firm. Routines ran smoothly due to truces between the actors giving and completing tasks. Cognitive resources were shown to be economized. The limited resources were not overtaxed by routinized tasks, thus allowing persons to attend to non-routine actions. Routines reduce uncertainty, even in the most extreme cases of pervasive uncertainty, by prescribing the choices of individuals within the organization. This aspect helped produce stability, which is another effect of routines. Stability was the result of not much change to routines. This provided a baseline by which change and possible pathology could be studied. Finally, routines stored both the tacit organizational knowledge, i.e., updating of superiors as to the progress of a routine, and individual knowledge, i.e., persons knowing how to locate specific information for a routine task, within the procedures of a firm. These types of knowledge extended to both procedural and declarative knowledge.

The importance of describing the theories, characteristics and effects of organizational routines was two-fold. First, all of these aspects lend to a larger understanding or theoretical perspective of organizational routines, which was the most pervasive in the study of routines. The precepts of this larger theory reached multiple domains such as management (Aime, Johnson, Ridge, & Hill, 2010; Jensen, Poulfelt, & Kraus, 2010; Zbaracki & Bergen, 2010; Hales & Tidd, 2009), occupational science (Essen, 2008; Evans & Rodger, 2008), child development (Murphy, Marelich, Herbeck & Payne, 2009; Kiser, Bennett, Brubaker, 2007), child disabilities (Summers, Larkins, & Dewey, 2008), national security (Foley, 2009), evolutionary studies (Nelson & Winter, 1982; Hodgson & Knudsen, 2008, 2010) and organizational and economic studies (Becker, Lazaric, Nelson, & Winter, 2005; Becker & Zirpoli, 2008; Schlicht, 2008).

Second, the larger understanding of organizational routines should serve as a framework against which the tenets of the grounded theory of this study can be compared. More specifically, the theory provided by Feldman and Pentland (2004) gave specific aspects of routines that seem to be applicable to the research question of the current study. It was presented in this section as a possible foil for the current study, not as a foundation. Although the theory was well developed and provided many aspects that could be relevant to the current study, it could not be the theoretic foundation for this study due to one major obstacle. In all the literature reviewed for this study, the researchers knew the routines to be investigated. In the case of the current study, the prescription or description of the actions taken by elite athletes, their routines, on competition day were not known. Before this theory of organizational routine could be used in a study, the routine must first be discovered and described. To complete this first step in understanding the routines and thereby describing or defining them, this study will employ

grounded theory. It is suggested that organizational-routine theory be considered for future research.

As stated in introduction of the routine literature, organizational routine literature, the largest source of data on routines by far, described how routines affect human organization. The second area of routine literature to be reviewed was developmental routines and rituals of children. In the next section, this literature will be described.

Developmental Routines

Developmental routine and ritual literature described the multifaceted manner in which routines and rituals aid in the growth of children. This term, "developmental routine and ritual," was not found in the literature per se, but was an inclusive term that was grouped for organizational purposes in this section based on the similar focus on the growth and maturation of youths. This body of literature dealt with specific issues surrounding the manner in which children develop. One area of interest to researchers was to understand the impact of the routines and rituals within the home and the effect on children with and without developmental problems (Durand & Christodulu, 2004; Buschbacher, Fox & Clarke, 2004; Murphy, Marelich, Herbeck, & Payne, 2009). Most of the research in this line of inquiry looked at children with disabilities, both intellectual and physical, within the home. The other area in which research was focused on routines and rituals was within education. This research focused a variety of issues in schools such as social development of disabled children (Macy & Bricker, 2007) and changes in daily routines when students first enter a school setting in kindergarten (Wildenger, McIntyre, Fiese, & Echert, 2008). To better understand this research through the selected articles, the remainder of this section will be divided into two parts. The first of these parts will present studies analyzing family routines and rituals in daily life. This particular area in the

literature tends to study the manner in which these familial routines, i.e., bedtime routines, affect or can be affected by disabled children. The final part will present literature within educational routines and rituals.

Family Routines and Rituals

The effect of family routines and rituals on the development of children is a robust field in academia. Situated in occupational therapy, sociology and psychology, studies within this area seem to focus on how the regimens of life affect both children with or without developmental disorders. In current literature investigating the development of non-developmentally-challenged children, researchers have investigated routines within the home. Evans and Rodger (2008) examined mealtime and bedtime routines and rituals within the home. These routines were defined as "the occupations that occur in the home on a daily basis and assist in organising time, that is, they provide structure to the family life (Schuck & Bucy, 1997)" (pp. 98). The characteristics of these occupations were the communication which conveyed the instrumental instructions and goals (Fiese et al., 2002, as cited by Evans & Rodgers, 2008). For instance, the goal of mealtime would be to feed the children their food. Parents provided the directives for accomplishing that goal.

Rituals were then defined as the symbolic form of communication, which designated the family unit and identified the members of the family (Wolin & Bennett, 1984, as cited in Evans & Rodger, 2008). Based on previous research in which these occupations were focused on being or becoming a family (Wilcock, 1998), this study used in-depth, semi-structured interviews in order to learn which of these occupations would be considered either routines or rituals. Researchers found that mealtime and bedtime could have been both a routine and ritual depending on the amount of emotional meaning applied to the occupation. As if on a continuum,

emotional meaning could transform these important occupations from focused on getting the kids to bed or eating food, to focusing on showing affection or the family being together. Along with understanding how children without disorders develop, there was a much larger body of literature devoted to the children with disabilities or developmental disorders.

Durand and Christodulu (2004) examined sleep difficulties of children with developmental disorders. Research in this area showed that children with severe developmental disorders and sleep problems were more likely to add stress and reduce parent satisfaction than children who were only severely developmentally disabled. This study recruited four children from the Albany Center for Autism and Related Disabilities who were admitted for sleep difficulties. Interventions were created based on the needs and disorders of the child. The parents of the children were administered the Albany Sleep Problems Scale and the Parental Sleep Satisfaction Questionnaire followed by an in-depth interview that determined the type of disturbance as well as its frequency, duration and intensity. Additionally, parents filled out sleep charts and behavior logs in order to create a baseline for comparison. Interventions of positive bedtime routines and sleep restrictions were implemented. Results showed that positive bedtime routines and sleep restrictions reduced nighttime awakenings and eliminated bedtime disturbances as well as increased parent satisfaction.

In a study that followed a similar pattern of intervention methodology and baseline measures, Buschbacher, Fox and Clarke (2004) studied a child with autistic-like characteristics and Landau-Klefffner syndrome in order to change the maladaptive behaviors in family routines at home. Researchers employed positive behavior support (Carr et al., 1999, Carr et al., 2002) and functional assessment with this developmentally challenged child in equal parts to reduce challenging behavior and assess engagement in the routine. Three routines were targeted by the

family as activities in which they wanted change in the behavior of the child. Interventions were enacted and a multiple baseline methodology was used to measure changes in behavior. Results showed that positive behavior support reduced challenging behavior and negative parent-child interactions as well as increased the child's engagement, positive child-parent interactions, and number of days that the child slept the entire night.

The last two studies examined interventions of routines of children who were developmentally disabled; the final study discussed in this section investigated the impact of parents with HIV/AIDS and their parenting routines on the development of children. Based on research on the maintenance of family routines (Stephenson, Henry, & Robinson, 1996; Loukas & Prelow, 2004; Hair, Moore, Garrett, Ling, & Cleveland, 2008) and parental monitoring (Guo, Hawkins, Hill, & Abbott, 2001, Hayes, Smart, Toumbourou, & Sanson, 2004; Snyder, Dishion, & Patterson, 1986), this study assessed how the family routines and parent monitoring of maternal HIV families affected the young to middle adolescent children. 118 families of mothers with HIV were assessed. Most of the families were part of the Parents and Adolescence Coping Together study (PACT I). The children in this study were 10 to 17 years of age. The families came from a multitude of race/ethnicity, marital status, education level, and employment status. The assessments demonstrated that familial routines lower rates of aggression, anxiety, worry, depression, conduct disorders, and binge drinking while increasing a positive self-concept. Additionally, higher levels of parent monitoring showed a significant decrease in depression, conduct disorders, and binge drinking with increases again in positive self-concept.

In these studies on family routines and the development of the child, the impact of routines in the lives of these children was immense. In addition to demonstrating the impact of

routines in the family lives of adolescents, the study of developmental routines also extended beyond the walls of households and into the classroom or educational settings.

Educational Routines

The final area of literature reviewed of developmental routines was educational routine literature. Studies in this field attempted to understand the impact of routines on student behavior such as social interactions (Macy & Bricker, 2007). Additionally, this research wanted to comprehend how children's daily routines change during the transition into the classroom (Wildenger et al., 2008). Each of these studies will be examined in the remainder of this section.

Macy and Bricker (2007) explored changes in social interactions with a classroom based upon interventions in daily routine. Based on literature that demonstrated the importance of complex interventions for accommodation of daily goals of disabled children within an inclusive classroom (Barnett & Escobar, 1990; Barnett, 2000; Bullis, Walker, & Sprague, 2001; Grisham-Brown & Pretti-Frontczak, 2003), researchers sought to find a simpler intervention that could positively impact the social skills and interactions of the participants. Embedded interventions have been shown to help develop social and therapeutic skills (Pretti-Frontczak & Bricker, 2004). In this baseline and intervention methodological study, three disabled male students and two student teachers in inclusive classroom settings participated in embedded classroom interventions through planned activities during circle time. Results of this intervention showed increases in all the participant social skills and selected social goals. This study was similar in participants and methodology to those studies in the developmental, familial routines of disabled children. However, the major difference was the implementation of the intervention within a classroom or educational setting instead of the home. The interventions were executed by student-teachers, not the parents. The changes produced by the embedded routines showed

similar changes and outcomes in the routinized life of the participants through the use of educational circles. However, these embedded interventions also yielded results of positive social change in the child's life. Another study that shows how changes to routines could affect social interaction was Wildenger, McIntyre, Fiese and Eckert's (2008) study on the transition from home to school.

Wildenger, et al. (2008) examined the transition of kindergarten students from the routines of home to the routines with a school setting. 132 parents/guardians participated in this study. Each parent/guardian was asked to provide demographic information, the children's daily routines and experiences in kindergarten preparations through a survey sent to their home through the school district's Early Education Department. Findings demonstrated that most of the children entering kindergarten (75%) did not complete their routines on time; only 43% going to bed on time. The unpredictability of daily routines in the children's lives was seen as one possibility as to why some students arrive at school less prepared than other students who followed a stable routine. Additionally, all the children experienced great change to their daily family schedule upon entering school. For instance, one major change was beginning their daily routines earlier when school began. Researchers, in accordance with Quas, Murowchick, Bensadoun, and Boyce (2002), found this change to familial routines to be a significant provider of stress in this transition in the student's life. The combination of all these factors made the transition to kindergarten, or school, difficult and one about which elementary teachers and administrators should inform parents.

Developmental Routine Summary

In this area of study, and specifically within the educational routine literature, routines were shown as an important, powerful source of change in a student's life. As in Macy and

Bricker (2007), routines could incorporate goals of the individual and be used to adapt behavior to those desired goals. Wildenger et al. (2008) described the change in the lives of kindergartners when they transition from family routines to classroom routines. These are similar findings to those in the family routine literature, discussed in the preceding section. Routines are potent developmental structures that spur on better behavior, lessen stress and better prepare students for school.

The developmental research was well done, but, did not directly lend insight into the current study of Olympic male swimmers' competition-day routines. Methodologically, these studies relied on baseline and intervention, survey or ethnography. Those studying these types of methods already know the routines, or a description of those actions that were of interest, before conducting data collection. As in the organizational routine literature section, the actions taken by the participants in the current study were not known and a descriptive methodology must first be implemented to understand what those actions are that make up the pattern of activities on a day of competition. Additionally, much of the familial routine research was conducted with disabled children or children with developmental disorders. The participants in the current research did not have physical or developmental disorders. Further, the educational research was conducted in a school setting with young children. Again, the current population was not under the age of 22 and data were collected within a sporting venue. Although the study of developmental routines demonstrated the power of routines in the conduct of the lives of the youth, as with the organizational routine literature, this provided a limited application for the current study.

Olympic Athlete Literature

The field of sport psychology has produced a steady line of inquiry into the characteristics of Olympic athletes. Although there are a multitude of angles in which this level of athlete has been investigated, one line of inquiry is especially pertinent to the focus of this study. This section will review Olympic literature focused on factors of performance of the Olympic athlete.

One of the first studies on the psychological skills of Olympic athletes was the seminal work of Orlick and Partington (1988). The researchers were interested in the mental readiness of 235 Canadian Olympic athletes from the Sarajevo or Los Angeles Olympic Games. In similar studies of the same population, which were part of a grant from the Coaching Association of Canada (Orlick & Partington 1986, 1987; Partington & Orlick, 1986, 1987a, 1987b), data were collected through either a qualitative interview (n=75) or a quantitative instrument (n=160). Qualitative interviews asked athletes about their background in mental training; factors associated with the athlete's readiness; the athlete's mental state at the Olympics, as well as previous best and worst performances; the role others, i.e., coaches and profession psychologists, played in the athlete's mental readiness; recommendations to improve athlete mental readiness; and post-Olympic feelings regarding the athlete's experience. The Athlete Readiness Form was a mailed survey in which the participants in the quantitative portion of this study were asked to respond to similar topics breached in the interviews. The major finding from this study was that total commitment in the pursue of excellence, quality training (e.g., daily goals, competition simulation and imagery training), and quality mental preparation for competition were elements of success for athletes as compared to less successful athletes. More specifically, one quality, mental preparation, the manner in which these athletes prepared for their competition mentally,

was in the form of a refined precompetition plan, a competition focus plan, an ongoing postcompetition evaluation procedure and a plan for handling distractions. This delineation of different plans produced the first definitions regarding both pre- and post-planning by successful Olympic athletes. Additionally, these terms would be used and tested by other researchers in future projects. Due to the impact of these terms for future research, the qualifications, as Orlick and Partington describe them, should be defined.

Pre-Competition Plan

A pre-competition plan included "the use of mental imagery, warming up well physically, positive thoughts, and reminders to focus on what had previously worked well" (pp. 115). As one participant was quoted as stating, "We have a set warm-up, we know exactly how much time it takes and exactly what things we're going to do. Immediately before the race I was thinking about trying to stay on that edge, just letting myself relax" (pp. 115). By following this plan, athletes were able to maintain focus until the time for their event began. In this context, a pre-competition plan would delineate what Cohn (1990) and Gould, Eklund, and Jackson (1992a) would later describe as a pre-performance routine, which will be discussed later in this section.

Competition Focus Plan

A competition focus plan occurred during the competition. It was a plan based on the athletes' metacognition skill based on the kind of focus that would help them in competition. This plan was implemented during the competitive event. In the case of one Olympic kayaker, the athlete followed a plan of what to do during each segment of the race (Orlick & Partington, 1988).

Post-Competition Evaluation Procedure

The post-competition evaluation was a self-monitoring technique by which the athlete learned from both the positive and negative portions of the race. Athletes reviewed and assessed their competition performance and extracted important lessons from their experiences. These corrective measure helped to improve future performances.

Distraction Plan

Each athlete had a plan for dealing with distractions or setbacks. Moreover, this was the ability of the successful Olympic athletes to "get back on track quickly when things did not go well" (p. 117). In regard to Olympic athletes, Orlick and Partington establish definitions of planning of Olympic athletes.

Following Orlick and Partington (1988), two research projects that yielded much research on Olympic athletes were conducted under the supervision of Daniel Gould. The first of these projects was sponsored by USA Wrestling. Gould et al. (1992a, 1992b) interviewed all twenty USA wrestlers who competed in the 1988 Seoul Olympic Games regarding their mental preparations, pre-competition cognition, and their effect on performance. These interviews followed the same interview protocol as Orlick and Partington (1998) with only minor changes to fit the issues that USA Wrestling wished to address. Survey instruments were not employed. This method, which excluded the self-report instrument methodology used in past elite athlete research, was chosen for three reasons: (a) it provided the athlete an opportunity to supply new information that was not part of a self-report instrument, (b) it allowed researchers to assess the athlete's reactions to the performance, and (c) it allowed researchers to move to more in depth factors, which were not part of self-report instruments. This study found that wrestlers with the best performances described a positive expectancy, optimal arousal, and sensation of high effort

and commitment along with preparation routines, strategic focus and motivational strategies. Conversely, those who did not perform well possessed negative feelings, as well as negative, irregular or irrelevant patterns of thought. When the athletes described their worst Olympic performances, deficiencies in their mental preparation strategies, in particular pre-match preparation routines, were seen as causes of their negative performance. Further, Gould and colleagues (1992a) found that pre-performance routines were also associated with all-time best performances.

In the second article of the USA Wrestling grant study, Gould, Eklund and Jackson (1992b) sought to compare the results of this inquiry on USA Olympic Wrestlers with previous research of psychological parameters associated with optimum performance states as well as report noteworthy additions to previous research, which was limited due to the instrument methodology (Orlick & Partington, 1988; Garfield & Bennett, 1984; Csikszentmihalyi, 1975; Ravizza, 1984). Following the same methodology as the first article, researchers found the best performances were marked by total concentration, optimal intensity, confidence and focus. Alternatively, the worst performances was marked by negative thoughts, being distracted, lack of focus and deviation from strategic plans. These results supported past research of Olympic athletes (Orlick & Partington, 1988), peak performance research (Garfield & Bennett, 1984), flow research (Csikszentmaihalyi, 1975), and peak experience research (Ravizza, 1984). More specifically, Gould and colleagues (1992b) found Olympic medalists to have followed their competition plans without deviation, while non-medalists reported divergence from their competition plans and tactical focus. Additionally, medalists were also associated with an effective refocusing when distractions occurred.

In a final article based on the data from the study on USA Olympic wrestlers by Gould, Eklund, and Jackson (1993) examined more psychological factors. The same qualitative methods and data analysis was used as in the first two articles. Gould et al. (1993) were focused on the coping strategies of the wrestlers during the Olympic Games. Through the interviews, four coping strategies were found when dealing with stress during the Olympics: (a) thought control strategies, (b) task focus strategies, (c) emotional control strategies, and (d) behavioral strategies. Control strategies were described as the blocking of distractions, perspective talking, positive thinking and prayer. Task focus strategies included narrow, immediate focus and concentrating on goals. Emotional control strategies were detailed as arousal control and visualization. Behavioral strategies included following a set routine and changing or controlling the environment. More specific to routines, "the strategy of adhering to the predetermined, familiar, ingrained behavioral routine to minimize uncertainty and focus attention was identified as useful" (pp. 89). Additionally, in conclusion, Gould et al. (1993) suggested future research in identifying specific, effective and ineffective coping strategies.

In a second major project, the United States Olympic Committee (USOC) provided a grant for Gould and colleagues to research the positive and negative factors affecting Olympic peak performance. This project yielded several articles. In 1999, Gould, Guinan, Greenleaf, Medbery, and Petersen investigated the mental skills and strategies of Olympic athletes and coaches in the team focus group portion of the larger USOC study. Eight teams from the USA that competed in the Atlanta Olympic Summer Games were interviewed regarding their confidence, commitment, cooperative routines, and physical, social and environmental factors that affected Olympic performance. Four of these teams met expectations of performance in the Games, while four teams did not. Qualitative methods, videotaped interviews, were used in

order to capture specific detailing of these factors. In comparing the experiences of the eight teams, team training, crowd support, family support, friend support, mental preparation, and focus and commitment were found to be significant factors affecting performance. For the four teams that met or exceeded expectations, these factors were viewed as positive by the athletes and coaches. Conversely, these same factors were experienced negatively by the teams that did not perform well. Additionally, the competition venue, team cohesion, and media preparation helped the teams that succeeded prepare for their Olympic experience, while the poorer performing teams stated that overtraining, distractions, and Olympic village distractions were specifically detrimental to their performance. Results regarding routines were found in agreement with Gould's et al. (1992a) and Williams and Krane's (2001) contentions on the importance of routines for USA Olympic wrestlers. Athletes who adhered to routines, specifically mental preparation routines and competition routines, produced higher levels of performance.

In a second article based on a grant from the USOC, Greenleaf, Gould and Dieffenbach (2001) investigated the factors influencing Olympic performance during the Nagano and Atlanta Games through the individual interview portion of this larger USOC study. In a similar methodology to Gould et al., (1999), eight Atlanta and seven Nagano US Olympic athletes, who either met/exceeded expectations or did not perform well, were interviewed to understand their mental skills and preparation that positively and negatively affected their performance. Results found that mental skills, positive outlook for the Olympics, support, multifaceted preparation and coaching positively affected competition. Negative factors included departing from normal routines, media distractions, coach issues, overtraining and injury. More specific to the current study, and in agreement with conclusions reached by the research described above, researchers

found that adherence to routines and coping strategies were described by the highest performing athletes, while deviation from those routines was viewed as negative by the athletes in this study.

In the third and final study sponsored by the USOC, Gould, Dieffenbach, and Moffett (2002) used participants from the Nagano and Atlanta Olympic games; however, in this study, the methodology and scope changed. In this study, 296 Atlanta and 83 Nagano US Olympic athletes were asked to complete a survey, either the U.S. Atlanta Olympic Games Athlete Survey or U.S. Nagano Olympic Games Athlete Survey, respectively, based on response from a qualitative pilot study of USOC members. These surveys asked questions concerning the performance, media, team, coaching, family and friend, sponsor, staffing, environmental, weather, equipment, and travel variables as well as miscellaneous variables, such as noise level in their room. The purpose of this study was to determine the level of influence assigned to these variables by the athletes. Interestingly, routines were only part of the performance variable of the survey.

Within the performance variable, athletes perceived previous Olympic experience and confidence in themselves and teammates as positive. Negative performance factors included lack of confidence in self or teammates, loss of composure, lack of ability to make tactical changes, and distractions that kept the athlete from following a competition routine. Further, 40% of the athletes reported that outside distractions disrupted their pre-performance routine. Although there was a great amount of information gathered through the work of Gould and colleagues through the studies discussed above, Gould conducted two additional studies on Olympic athletes.

Gould, Dieffenbach, and Moffett (2002) examined the psychological characteristics and development of Olympic champions. Ten USA Olympic champions and winners of 32 gold

medals were interviewed, as were one coach and a significant other. Additionally, the Sport Anxiety Scale (SAS), Multidimensional Perfectionism Scale (MPS), Life Orientation Test (LOT-R), Adult Trait Hope Scale, Task Ego Orientation Scale Questionnaire (TEOSQ), Test of Performance Strategies (TOPS), and Athletic Coping Skills Inventory-28 (ACIS-28) were used to assess mental skills and attributes that are thought to positively affect elite performance. This article extended the work of Csikszentmihalyi, Rathunde, Whalen, and Wong (1993), Hanton and Jones (1999) and Durand-Bush and Salmela (2001) as well as compared the results to Bloom (1985) and Cote (1999). The authors provided an extensive review of literature regarding the development of elite athletes and their psychological skills. The results, when compared with this extensive past research, were reported as follows:

> Characteristics included: self-regulation of arousal; high confidence; better concentration and focus; an "in control but not forcing it" attitude; positive imagery and self-talk; and high determination and commitment. Skills used to achieve peak psychological states included: imagery; goal setting; thought control strategies; arousal management; well-developed competition plans; well-developed coping strategies; and pre-competitive mental preparation plans. The quantitative and qualitative results collected with these Olympic champions paralleled these results almost exactly (pp. 198).

Within this list of psychological skills from earlier works, mentioned above, Gould and colleagues added sport intelligence. This characteristic included the ability to analyze, innovation in one's technique, and learning quickly. Moreover, none of the Olympic gold medalists possessed all the characteristics. Each athlete was unique and used a distinctive, yet similar, combination of characteristics to become an Olympic gold medalist. Within this

description of the development of these characteristics, researchers found that “influence[s] were both direct, such as teaching or emphasizing certain psychological lessons, and indirect, involving modeling or unknowingly creating certain psychological environments” (pp. 199). For instance, coaches directly taught, mentored, fostered, nurtured and instilled psychological lessons while indirectly modeling those psychological elements needed for development. Teammates indirectly aided in the athlete’s development through modeling, learning together and nurturing these skills. Additionally, other elite athlete and competitors modeled the type of psychological skills that were learned by these athletes. Further, siblings, both directly and indirectly, and grandparents and significant others indirectly helped these athletes develop psychologically through instruction.

In 2008, Taylor, Gould and Rolo investigated the practice and competition strategies of Olympic athletes. Using the first self-report instrument in the practice and competition domains, the researchers administered the Test of Performance Strategies (TOPS) to 176 US Olympians from the 2000 Sydney Games in order to test the internal reliability of this instrument. This 64-item instrument evaluated 16 sub-scales of psychological skills, eight areas for practice and eight for performance. “These subscales include positive self-talk, emotional control, automaticity, goal setting, mental imagery, activation, relaxation, and negative thinking (competition) and attention control (practice)” (Taylor et al., 2008, pp. 21). Although the focus of Gould’s and colleagues’ study was to test the internal reliability of this study in a sample of Olympic medalists and non-medalists, this manuscript also showed significant differences in the 16 sub-scales of the TOPS between groups. Within practices, self-talk and emotional control discriminated the medalist from non-medalist. The competition subscales differentiated the athletic groups with respect to competition, imagery, automaticity and emotional control.

Additionally, gender differences, i.e., the females participated in more positive self-talk, and age differences, i.e., the younger athletes indicated greater automaticity while the older athletes used imagery more often, were found. Pertinent to the focus of this study, the only mention of a routine in this study was within an imagery question in the TOPS. Within this sub-scale, routines were only mentioned as an assumed part of their competition-day ("I imagine my competitive routine before I do it at a competition.") (pp. 25). Further, if the athlete did imagine their routine before the day of competition, it seemed as though the researcher was not interested as to whether the routine was rigid or adaptable to situations that might arise. Since, once again, quantitative inquiry did not yield information regarding competitive routines, the nature of the competition-day routine might need to be investigated in the current study.

Olympic Athlete Literature Summary

This review of Olympic athlete literature provided insight into the psychological skills in the production of elite or optimal performance at the Olympic Games. From this review, four factors regarding routines and Olympic athletes need elaboration. First, there are several routines that athletes use during preparation, competition and reflection. Beginning with Orlick and Partington (1988), this research delineated several plans or routines that affected performance. These included a pre-competition plan, competition focus plan, post-competition evaluation procedure, and distraction plan. Gould and colleagues (1992a) expanded the list of routines when they included the terms pre-match preparation routines and pre-performance routines. Additionally, competition routines were proffered as variable in producing high performance (Gould et al., 2001). These terms have similar definitions which must be defined more clearly. In the next section, Routines in Sport, these routines will be further defined and the placement of the current study within that literature will be detailed.

Second, adherence to a routine was necessary for elite or optimal performance. Throughout most of the studies on Olympic athletes, routines positively affected performance. Gould and colleagues (1992a) reported that mental preparation strategies, or pre-match preparation routines, were associated with all-time best performances. Gould et al. (1993) stated the adherence to familiar, ingrained routines in order to focus attention and reduce uncertainty was described as useful by Olympic athletes. Athletes that stuck to performance routines produced elite performances (Gould et al., 2001). Routines were also part of coping strategies for stress during Olympic competition (Greenleaf et al., 2001). Finally, deviation from routines was reported as a negative factor during poor performances (Gould et al., 1992a, 1992b, 2002a; Greenleaf et al., 2001). Within all these manuscripts, specific actions that were taken by athletes were not discussed. It was determined that a study investigating which specific actions were part of competition routines would add greatly to the existing body of literature.

Third, athletes learned their routines from both direct and indirect instruction (Gould et al., 2002b). Athletes learned their routines directly through instruction through psychological lessons from coaches and siblings. Indirect instruction was provided by coaches, teammates, other elite athletes, competitors, siblings, grandparents and significant others. This type of knowledge acquisition was determined to be an important part of the psychological development of an elite athlete. Although this study delved into routines, the manner in which routines were learned was part of the current study.

Finally, a qualitative methodology was used the most in this literature and provided in-depth descriptions of routines. All the research reviewed for this section, except for Gould et al. (2002a), used qualitative interviews. In most of these studies, the research question revolved around the descriptions or in depth inquiry into the psychological characteristics and skills of

Olympic athletes. In the earlier manuscripts, e.g., Orlick and Partington (1988), Gould et al. (1992a, 1992b, 1993) researchers did not necessarily know the various variables that impacted optimal performance. In these cases, comparisons between the best, worst and most crucial performances and medalists and non-medalists were examined in order to discover significance within and between groups. Conversely, when quantitative surveys were the main data collection source in Gould and colleagues (2002a), the variables investigated were already known by researchers based on past research and pilot studies. The current study sought to understand the specific actions and meaning of competition-day routines. The actions were not known. An in depth methodology was needed in order to get a description of those actions enacted on the day of competition. To this end, this literature, as was seen with organizational routine literature, pointed to qualitative methods.

In this section, the review of Olympic athlete literature has provided insight into the nature and impact of routines within elite competition. These studies point to specific routines used by athletes, the need for adherence to routines, knowledge acquisition for Olympic athletes and the demand of qualitative methods. As stated in this conclusion, there are several different routines that have been researched. In these, definition and characteristics of routines need further delineation. In the next section, Routines in Sport, these aspects of routines will be provided.

Routines in Sport

There are many different routines used by athletes in sport. As described above in the works of Orlick and Partington (1988) and Gould and colleagues (1992a, 2001), the variety of routines studied within sport include (a) pre-competition plan, (b) match preparation routine or preparation routine, and (c) pre-performance routine. These routines within sport could be placed into two groups: (a) pre-performance routines and preparation routines. In this section,

both pre-performance and preparation routines will be defined and discussed followed by a conclusion in which the current study will be situated within this literature.

Pre-competition Plan and Pre-performance Routine

As stated in the last section of this chapter, Orlick and Partington (1988) provided four distinct plans, strategies and routines that athletes used during Olympic competition. One of these was a pre-competition plan. This category included "the use of mental imagery, warming up well physically, positive thoughts, and reminders to focus on what had previously worked well" (Orlick & Partington, 1988, pp. 115). When followed, athletes maintained focus until the start of their event. In this context, a pre-competition plan would delineate what Cohn (1990) and Gould et al. (1992a) would later describe as a pre-performance routine. Therefore, a pre-competition plan seemed to be the plan created before the competition that was followed as a pre-performance routine. Orlick and Partington's (1988) definition of a pre-competition plan's actions was a precursor for later pre-performance research.

In a seminal review of literature, Cohn (1990) presents research previously conducted in the area of pre-performance routines. Pre-performance routines were defined as "physical and mental preparation strategies used prior to motor skill execution ... involv[ing] an intricate combination of cognitive strategies coupled with behavior responses" (pp. 301). Gould et al. (1992a) further defined pre-performance routines as action that includes both physical and mental components, i.e., warm-up in conjunction with visualization, positive self-talk, and other planned mental activities. Although the definitions are similar, the most important factor was that this routine occurs prior to motor performance. This distinction can been seen in studies conducted on both open- and closed-skills in sport.

Cohn reviewed studies conducted on sports such as golf (Boutcher & Crews, 1987; Cohn Rotella, & Lloyd, 1990; Kirshenbaum & Bale, 1980), tennis (Moore, 1986; Moor & Lloyd, 1986), basketball (Lobmayer & Wasserman, 1986; Wrisberg & Anshel, 1989), soccer (Vealey, 1986), volleyball (Heishman, 1989; Kolsher, 1984), bowling (Kirschenbaum, Ordman, Tomarken, & Holtzbauer, 1982) gymnastics (Mahoney & Averner, 1977), wrestling (Gould et al, 1981), skiing (Orlick, 1986), and diving (Highlen & Bennet, 1983). Within this research were examples of both closed- and open-skills. Closed-skills were skills like putting in golf or free-throw shots in basketball.

In golf, a self-paced, closed-skill sport, Crews and Boutcher (1986) produced a seminal work in pre-performance literature. This study observed 12 LPGA tour players over 12 holes of golf. All pre-shot routines were observed. During that time, pre-shot routine was described as standing behind the ball, moving to side of ball, setting club behind ball, looking at target, setting feet, making three waggles toward ball, taking two more glances at target, and then starting the backswing. Few variations such as practice swings were observed. Time was also measured from the time the pre-shot routine began, i.e., stand behind ball, until the end of the routine, the completion of the swing. This study also showed that better performing players reduced variability in both the action and timing of the pre-shot or pre-performance routine (Gould et al., 1992a).

In another self-paced, closed-skill sport study, Lonsdale and Tam (2007) recently studied intra-individual reliability in elite basketball players free throw shooting accuracy. Research observed 14 National Basketball Association (NBA) play-off games. 284 free-throws were analyzed for their duration and specific behaviors. An intra-individual standardized score was assigned for each player. Additionally, each player's behaviors within the pre-shot, or pre-

performance, routine was delineated and each shot was designated as either “sequence followed” or “sequence not followed” (pp. 262). Results showed that the temporal consistency, the time from start to finish of the pre-performance routine, did not significantly affect the accuracy of the shot. However, there were significant differences in the accuracy of the shot between the instances when the players followed their routine and when they did not. Although this study did not address the underlying mechanisms for the improved accuracy when pre-performance routines were followed, this study showed the importance of adhering to a routine within a closed-skill, self-paced sport.

In an open-skill sport, such as wrestling, research has demonstrated the importance of pre-performance routines. As described above, Olympic wrestlers performed at their optimum when they were able to follow their pre-performance routine (Gould et al., 1992a) or were negatively affected when they were distracted from their pre-performance routine (Gould et al., 2002a).

In all this research, except for Gould and colleagues (1992a), the temporal nature of the pre-performance routines seemed to be part of the definition. In golf and basketball, pre-performance routines were synonymous with pre-shot routines. Cohn (1990) placed these routines directly before motor skill performance. Two reasons for not mentioning this aspect by Gould might be that he and his colleagues were investigating open-skilled sports, which would make defining when a pre-performance routine began difficult, and researchers were not necessarily focused solely on pre-performance routines.

Pre-performance routines were the most researched routine within sport. It was the enactment of the athlete’s pre-competition plan that aided in keeping focus and elite

performance. Other types of routine that have also been a point of some research, although much smaller in amount of literature, were preparation routines.

Match Preparation Routine or Preparation Routine

According to Gould and colleagues (1992a), match preparation routine, or preparation routine was a dimension of the higher order theme of mental preparation routine (for more information, see Gould et al., 1992a, above). A match preparation routine, during the Olympic athlete's best match, included such activities as visualization until the beginning of the match, imagery, positive self-talk, following a routine, effective warm-up, and sticking to a strategy or routine. This routine seemed larger in scope than the pre-competition plan or pre-performance routine, described above. There is not a temporal element to this definition except that the routine ended at the beginning of the motor performance.

Routines in Sport Summary

Based on the definitions and descriptions of pre-performance plans, pre-performance routines and match preparation routines or preparation routine, there seemed to be little difference between these routines. As described above, pre-performance plans and pre-performance routines had almost identical definitions. The major difference was that the former occurred when the athlete planned the mental and physical activities necessary to be prepared to perform while the pre-performance routine was the acting out of that plan. This connection is based upon the description provided from the data by Orlick and Partington (1988). In this, the Olympic athlete stated, after mentioning warm-up, "Immediately before the race I was thinking about trying to stay on edge, just letting myself relax, and doing a lot of positive self-talk about what I was going to do" (pp. 115). The sense, based upon this further description from the data,

was that the preparation plan was the pre-performance routine, planned in advance of arrival at the competition.

Preparation routines, which seemed synonymous with match preparation routines, were the actions taken by athletes to prepare for their event. These activities included visualization until the beginning of the match, imagery, positive self-talk, followed routine, warmed-up well, and stuck to strategy or routine (Gould et al., 1992a). Based on this definition, a difference between preparation routines and pre-performance routines was seemingly indiscernible. Within the article, Gould and colleagues (1992a) provided a chart in which these characteristics were placed within the routine [See Table 1]. From that, it could be assumed that (a) since adherence to a routine was part of the match preparation routine, then this routine was placed in a larger context of preparation and (b) the routine that was followed was the pre-performance routine. However, in the text of the manuscript, the authors wrote:

> The most frequently mentioned higher order theme within this dimension, match preparation routines, was referred to by 55% of the wrestlers. The pre-performance routines often included both physical and mental components, such as warm-up in conjunction with visualization, positive self-talk, and other planned mental activity. (pp. 368)

In this instance, pre-performance routines seemed synonymous with the match preparation routine because (a) match preparation routines were not defined within the article and (b) the authors did not provide a temporal element to the definition, which could extend both the preparation or pre-performance routines to cover exactly the same actions. The importance of this definition rested with the temporal element of the routine, not the actions taken.

As described above, the actions of the routines were the same, regardless of the different or sameness of the routines. Time might differentiate the routines depending on how one reads the descriptions. In the latter understanding of the routines, in which match preparation and pre-performance routines were the same, the temporal element of the routine fell back on Cohn (1990) and other pre-performance literature; the routine occurred immediately before performance. If one prescribed to the former, differentiated notion of the routines, since Gould (1992a) gave no time element to either routines, it could be said, then, that the preparation/pre-performance routine could begin when the athlete arrived at the venue, or, although seemingly outside the scope of this definition, extended back to the entire day of competition.

By reviewing the study, the only one found with this term, the interview protocol did not necessarily limit questions to the venue, events, or practices at the Olympics (Orlick & Partington, 1988; Gould et al., 1992a). Athletes were asked about mental training; factors associated with the athlete's readiness; the athlete's mental state at the Olympics, as well as previous best and worst performances; the role others, i.e., coaches and profession psychologists, played in the athlete's mental readiness; recommendations to improve athlete mental readiness; and post-Olympic feelings regarding the athlete's experience. The interviews were not limited to the actions taken by the athletes while at the venue of the competition. However, the issues of interest or the scope of the study was focused on the best, worst and more crucial matches in which the wrestlers participated and the mental preparations for those performances. This focus would firmly place the questions within the venue or place of competition. Therefore, as far as the temporal element of match preparation/pre-performance routines, questions were raised as to the time period, the start and finish of a routine, in which the actions were taken by the athletes.

Based on the discussion above, one could argue for either a different or identical definition of pre-performance and preparation routines. Regardless, the current study aimed to add clarification and insight into preparation routines. If one stated that the routines were different, the present study expanded the scope of the preparation routine from being at the venue to the entire day leading up to the performance through describing the competition-day routine. If one stated that the routines were the same, e.g., preparation routine was an early definition that has been overtaken by the term pre-performance routine. The current study would bring back the idea of a preparation routine in the competition-day routine. Regardless, this study was situated within the literature of routines in sport through the expansion of the preparation routine.

This section ends the review of literature on routines. In the sections of this review of literature above, organizational routines, developmental routines, Olympic athlete literature and routines in sport were investigated and described. One last section is proffered below. Since the current study was focused on Olympic gold medalist swimmers, or elite athletes (Johnson et al., 2008), expertise theory lent some insight and points of comparison.

Expertise Theory

Over the last forty years, expertise literature has described numerous characteristics of experts. Literature reviews of expertise theory detailed specific attributes of experts based on general precepts of expertise (Ericsson & Lehmann, 1996; Feltovich, Prietula & Ericsson, 2006), expert teacher instruction (Bloom, 1986; Glaser, 1987, 1990; Berliner, 1994; Tan, 1997), expert athletic coach instruction (Bell, 1997; Schempp, McCullick, & Mason, 2006; Schempp & McCullick, 2009), and expert athletic sport performance (Thomas, Gallagher, & Lowery, 2003; Hodges, Starkes, & MacMahon, 2006; Janelle and Hillman, 2008). These documents delineate specific characteristics of experts with regard to the requisite skill, knowledge and experience

underlying superior performance. The authors above reviewed seminal studies that showed experts to possess similar, key characteristics regardless of the area, field or domain in which they perform. These characteristics include, but are not limited to:

1. An extensive, hierarchical knowledge base within a specific domain that was developed over years (DeGroot, 1966; Simon & Chase, 1973a, 1973b; Chi, Glaser & Rees, 1982).
2. Participation in deliberate practice for approximately ten years or 10,000 hours (Simon & Chase, 1973a, 1973b; Ericsson & Smith, 1991).
3. Expertise is not transferable to other domains (Glaser & Chi, 1988).
4. Knowledge acquisition through experience, media sources, talking with other experts, and reflecting on performance (Ericsson & Charness, 1994; Fincher & Schempp, 1994; Schempp, Templeton, & Clarke, 1998).
5. Automaticity in performing tasks (Bryan & Harter, 1899; Simon & Chase, 1973b; Siendentop & Eldar, 1988; Glaser & Chi, 1988).
6. Attention to the atypical (Berliner, 1994; Carter, Sabers, Cushings, Pinnegar, & Berliner, 1987)
7. Selection of relevant information for problem solving (DeGroot, 1966; Simon & Chase, 1973a, 1973b; Chi, Glaser & Rees, 1981; Chi & Glaser, 1988).
8. Acute perceptual capacities (Chi, Glaser, & Farr, 1988; Carter, et al., 1987; Howsner & Griffey, 1985; Doyle, 1986; Woorons, 2001)
9. Recognition of meaningful patterns of information (DeGroot, 1966; Simon & Chase, 1973a, 1973b; Chi, Glaser & Rees, 1981; Chi, Feltovich & Glaser, 1981; Cooke, 1992).
10. Experts represent problems they encounter at a deeper and richer level than do non-experts (Chi, Glaser & Rees, 1981).

11. Experts value planning, which includes contingency plans, even though they have great intuition, can easily take advantage of opportunistic teaching moments, are more flexible in their planning, and can change representations faster when needed (Housner & Griffey, 1985; Glaser, 1987).

This agreement on the characteristics of experts provided a framework of attributes that should be typical of the participants in the current study. However, to narrow the scope of the present study to the characteristics of elite athletes, of particular interest to this review of literature were the unique characteristics found within expert athletic research. To this end, the remainder of this section will identify pertinent characteristics of experts in athletics by examining literature from expert athletic performance and expert athletic coaching instruction. A brief description of each of the characteristics of experts in athletics will follow.

Experts in Athletics

Expertise theory, as used in the investigation of persons in athletics, can be divided into two categories: (a) expert athletic performance and (b) expert coaching instruction.

Expert Athletic Performance. Starkes and Allard (1993) defined expert performance in sport as the consistent, superior athletic performance over extended periods of time. To understand the skills, knowledge and experience that culminate in expert performance in sport, researchers have used a myriad of methods to examine both the psychological and motor skills used by elite athletes in their superior performances. Hodges, Starkes and MacMahon (2006), in their review of expert athletic performance literature, detailed the research movements, unique features, historical roots, and meta-analysis of expert performance in sport. From this review of literature, Hodges and colleagues (2006) described three phases of research in expert sports performance. The first movement or phase of expert sports performance research focused

primarily on sport-specific “tests of recall and recognition, temporal and spatial occlusion of visual information, and anticipation ... [as well as] verbal-protocol analyses” (pp. 471). In the 1990’s, this movement was perceptual-cognitive and attempted to find differences between experts and novices. The criticism at that time was defining “experts” and “expert performance.”

The second phase of research centered on the work of Ericsson and Smith (1991), which called for a new direction in expertise research. In this manuscript, Ericsson and Smith call for a three stage process for recognizing expert skills. First, researchers detailed the defining skills of experts and novices within specific domains. Second, laboratory testing was designed to measure the reproducible skills. Finally, based on the discovery and testing of these reproducible skills, researchers added to expertise theory. A considerable number of studies followed these guidelines and developed a more robust expertise theory. For example, based upon these three stages of forming a theoretic framework around the skills used by experts, Ericsson, Krampe, and Tisch-Romer (1993) studied 120 participants from 6 domains and found that those who developed to expert did so through deliberate practice, which is training strategically designed to improve performance, conducted under the supervision of a coach or master teacher. Ericsson et al. (1993) proffered deliberate practice as a key to development of expert skill. Since that seminal work, a continuous flow of studies have helped shape and uphold this important aspect of expertise theory using the prescribed testing procedures set forth in Ericsson and Smith (1991).

By the end of this phase of research, the major findings pointed to the importance of perceptual and cognitive skills within expert sport performance. More specifically, perception and decision making were of highest importance in individual sports, while cognitive skills were of slightly more consequence in team sports.

More recently, research in expert sport performance has entered its third movement or phase. This phase is marked by "ecological psychology, dynamic systems theory, and associated techniques" (Hodges, Starkes, & MacMahon, 2006, pp. 473). Researchers have begun to focus on movement within the time demands of sport in their analysis. For instance, the work of Gibson (1979) has influenced researchers to see learning and skill performance as a result of "educating attention," by which specific information is identified within movement skills. This requires researchers to move away from reductionist methods, i.e., response time in cognitive function, and toward coupling observable perception and action. "Although a reduction in the variability in movements is a common distinguishing characteristic of experts when compared to intermediate performers, it is the *qualitative* nature of this variability in relation to the task goal that is important, rather than the general amount of variability per se" (Hodges et al., pp. 480). The end result was more ecological validity, which is of greater importance the more expert of a performer an athlete became.

Janelle and Hillman (2008), in a similar review as Hodges, Starkes and MacMahon (2006), identified pattern recognition, memory, and tactical skills; anticipatory behaviors and visual search strategies; the psychophysiology of expert performance; anxiety, emotion and expert performance; and psychological skills as areas of interest to sport psychologists within expert sport performance. Based on these areas of inquiry, the research demonstrated that expert sport performers, or elite athletes, possessed:

> a deeper, more intricate knowledge base by which to form representations of typical sport scenarios; they [were] more efficient and effective in recognizing and responding to structured game situations; they [were] more capable of matching appropriate strategies and tactics to game situations, which allow[ed]

> them to respond more effectively; they [were] more attuned to the richest informational sources provided in the visual scene, which enable[d] them to make efficient and appropriate decisions; and their attentional and coordination capabilities appear[ed] to be less influenced by variations in affective states (pp. 39).

The characteristics listed within this review are knowledge, perception, decision making and attention.

The literature from expert performance in sport provided some insight into the characteristics of elite or expert athletes. As indicated above, expert performers possessed knowledge of the sport, perception of game patterns, decision making within the performance, and attention to the situation. Additionally, this research was now using, in the newest phase of research, qualitative techniques in order to study expert sport performance within an ecologically valid domain.

Although it should be noted that this research was focused on performance instead of the actions surrounding the actual races of the Olympic gold medalist swimmers on a day of competition, these insights into expert sport performers lent important insights into qualities of elite athletes and general methods currently being used in studies of these performers. To this end, the current study will add to this literature by providing a qualitative study that helps to describe the knowledge, perception, decision making and attention of expert sport performers.

As described above, expertise in sports performance produced relevant information as to two important characteristics for the present study. Beyond these two attributes, decision making and perception, other areas of expertise research provided more applicable insights to the

current study. These characteristics were presented in expert athletic coaching instruction literature.

Expert Athletic Coaching Instruction. Since the mid-1990, a concerted effort to better understand the skills, knowledge and experiences of expert athletic coach instructors yielded important characteristics. Researchers incorporated the distinct attributes of expert teacher instruction (Berliner, 1994; Tan, 1997; Bell, 1997) as a framework for investigating expert athletic coach instructors (Schempp, McCullick, & Mason, 2006; Schempp & McCullick, 2009). This theoretical perspective applied expertise theory to the tasks of teachers. Since teachers and coaches have similar responsibilities, both managerial and instructional, the work of Berliner (1994) provided distinct traits that would be testable within the domain of coaching. The results from these studies provided insight into athletic coaching instruction within the domain of sport. These understandings also denoted aspects of experts within sports that might pertain to the current study. This section will begin by providing a description of expert teacher instruction theory followed by the results of research in expert athletic coach instruction.

Berliner (1994) suggested five discrete developmental stages of expert teachers: (a) novice, (b) beginner, (c) competent, (d) proficient, and (e) expert. Each of these stages had distinct characteristics for a person at specific levels of development. For instance, a novice teacher was focused primarily on managerial tasks and had no control over the classroom environment due to possessing no practical experience as a teacher (Berliner, 1994; Schempp, 1989). A beginner teacher had some practical experience; was not completely limited to managerial tasks, although they adhered more to managerial tasks than instructional tasks; and still had little control over the classroom environment. Competent and proficient teachers have reached the intermediate point of development. A teacher at this level had progressed due to a

conscious choice to develop through differentiating between the important and unimportant, seeing similarities in events, and developing an intuitive sense of situations (Berliner, 1994). Still orientated to strict following of the rules, teachers in these stages also knew when to ignore or follow rules (Bell, 1997). Finally, an expert teacher has reached, through ten years of deliberate practice, the stage where there was control of the classroom, improvisation of lessons, and effortless performance in helping students learn (Berliner, 1994; Tan, 1997; Bell, 1997). As described only in part, Berliner (1994), Tan (1997) and Bell (1997) provided distinct characteristics and descriptions that have been studied in the area of expert athletic coaching instruction. Not only did these characteristics reflect current conceptions of experts in general, these attributes also pertained specifically to the domain of sport and athletics. The results of the application of the depictions of expertise within teacher instruction to athletic coach instruction will now be given using findings from both general expertise theory studies as well as sport specific expertise literature.

Knowledge. Experts have an extensive, hierarchical knowledge within their domain that developed over years (Simon & Chase, 1973b; Tan, 1997). As mentioned above, the researchers suggested that the knowledge and skill to be an expert took ten years to develop. Simon and Chase (1973b) added to this "ten year rule" when they conducted a study using computer modeling to examine the processes used by master chess players when considering check-mating moves. Perceptual processing was tested through studying the eye movement of these players during tasks. The significant finding from this study was that the acquisition of chess skills took extensive time during which the player built up recognition memory for familiar chess patterns. In other words, any skill performed by experts "was the result of acquiring, during many years of

experience in their domain, vast amounts of knowledge and the ability to perform pattern-based retrieval" (Ericsson & Lehmann, 1996, p. 275).

Within coaching, experts' extensive knowledge extended to a thorough understanding of their specific sport, team and player management, coaching principles and planning skills (DeMarco and McCullick 1997). Expert coaches used their knowledge for teaching purposes. Coaches synthesized their knowledge into meaningful units that they communicated to their athletes for greater understanding and application (Siedentop & Eldar, 1989). Further, expert coaches used their base knowledge to find the best manner in which to present pertinent information to their athletes or other coaches (Bian, 2003). To gain this knowledge, coaches leaned heavily on several sources (Shulman, 1987; Fincher & Schempp, 1994; Schempp et al., 1998).

Knowledge acquisition. Three significant sources of knowledge acquisition are people, reading materials and self-reflection (Fincher & Schempp, 1994; Schempp et al., 1998). First, expert coaches relied on information from other people such as coaches, athletes, and people they worked with through the years (Schempp et al., 1998). For example, an expert coach might seek out other peers who had extensive knowledge, skill or experience that could aid in understanding a current problem, technique, activities, drills, behaviors, and communication (Schempp et al., 1998). By talking with other colleagues, the expert coach gained insight into factors surrounding their topic of interest.

Second, expert coaches read extensively within their sport (Fincher & Schempp, 1994). This included books, journals and magazines, films, and popular media. These sources were not limited to publications in their sport alone. In a recent study, Jones (2008) asked expert coaches to identify three recommended readings for beginning coaches. Books such as the Bible

and the Art of War as well as books by John Wooden were suggested to be starting material for all coaches.

Finally, expert coaches used self-monitoring techniques for knowledge acquisition of their practice. As will be described in more detail below in the Self-Monitoring section, experts used reflective self-monitoring to assess their weaknesses and make strategic plans to correct their shortcomings. It was from these self-monitoring practices that expert coaches created both challenges and actions specifically designed to produce better coaching (Schempp, McCullick, & Mason, 2006).

More specifically, expert coaches learned through all these types of knowledge sources. Coaches gained understanding through interaction with other coaches and various media (Schempp et al., 2006). For instance, Ericsson and Charness (1994) found that experts had large libraries devoted to their subject. Additionally, expert coaches were shown to have used books, magazines, journals, workshops, and other coaches as sources of their knowledge (Fincher & Schempp, 1994; Schempp et al., 1999) in order to pass that information on to their athletes (Siedentop and Eldar, 1989). Whether through interactions or learning through interaction with others and media, experts had developed a vast knowledge of their domain.

Perception. Experts possessed acute perceptual capacities (Tan, 1997). In two studies of expert chess players, DeGroot (1966) and Simon and Chase (1973a) found that when confronted with a board set in a game situation, the master chess players quickly perceived patterns in the placement of the game pieces. This information was used as cues to access their long-term memory for the best possible next move. Experts accomplish this by matching the perceived information against their extensive knowledge base in order to extrapolate meaning from the complex situation (Cooke, 1992). For expert coaches, perceptual skill assisted in

predicting possible outcomes well in advance of non-experts, sorting important information from the non-important, attending to athlete performance in the midst of a game, supplying information for the best improvement to their athletes, and recognizing factors that affect their athletes or team (Schempp, McCullick, & Mason, 2006). Experts also use their perceptual skills to aid in problem solving.

Flexibility. Berliner (1994) reviewed literature on expert instruction. This chapter culminated in five propositions regarding the differences between novice and expert teachers. One of these propositions referred to the flexibility by which an expert teacher changed their lesson or routine in order to take advantage of a learning opportunity. Two articles of note were reviewed in this section regarding flexibility by Berliner (1994). First, Borko and Livingston (1988) studied the improvisational skill of both expert and novice teachers. It was determined that expert teachers had a well thought out plan to follow; however, they were also flexible in following that plan with regard to responses of their students (Berliner, 1991). Adding to this finding, Sharpe and Hawkins (1992) found that expert teachers had more predictable actions and routines, they also possessed an ability to shift their lesson plans and routines to fit the teaching situation. This allowed for "expert instruction [that] seems to exhibit a consistent rhythm, a high velocity, a coherent yet flexible structure, and a fluent orchestration of elements" (pp. 73). Both these studies found experts able to adapt or change the structure of their lesson, to a point, in order to accommodate the needs of the students or teaching environment. As was the case with expert teachers, it is expected that elite athletes will be able to adapt the structure of their routine to meet the demand of the situations that arise during an elite competition.

Problem solving. Chi, Glaser and Rees (1982) conducted eight empirical studies of problem solving by experts and novices in physics. In this study, the researchers showed that

experts understood both the objects in the problems as well as the underlying principles of the problem. In addition, the experts were slower in their analysis of the problem; however, they were faster and more accurate in finding the overall solution. This phenomenon was due to the ability of the expert to gather more information about the problem before making a decision. Patel and Groen (1991) found that this was due to the experts working the problem "forward" from what they knew to the more abstract. In other words, the expert was more interested in the underlying facts surrounding a problem in order to understand what was happening, instead of working "backward" from the observation and then trying to make sense of the situation.

An expert coach used his/her knowledge base and perceptual skills to assess a problematic situation. Considerations included what was best for the athlete, the team, the coaches, the parents and the community. This analysis took significant time because the experts attended to the principles that underlie the circumstances (Chi, Feltovich & Glaser, 1981 presented in Tan, 1997). Although slow in processing all the pertinent information, experts were quick to make informed, correct decisions. Many of the decisions made by expert coaches are logical and in agreement with convention, however, sometimes a decision is brought about by another characteristic of expertise: intuition.

Intuition. Experts used their intuition to make decisions (Berliner, 1994; Schempp et al., 2006). Over the years, the experiences and the vast knowledge base were used to make decisions based on their feeling of what needs to happen, even when the decision went counter to conventional logic. For coaches, this was achieved through "years of reflective coaching, experimentation, trying, failing and succeeding to gain an expert's intuitive ability" (Schempp et al., 2006, p. 157). This skill took time to acquire; however, this skill was one of the hallmarks that separated the expert coach from those who did not perform at the highest levels.

Automaticity. Automaticity occurred when an individual performed a task over and over again until that action was completed quickly, accurately, easily and without conscious effort. The first study concerned with automaticity was conducted in 1899 by Bryan and Harter. These researchers examined the practices and skills of Morse Code telegraphers. It was concluded that the highest level of skill needed ten years to develop and that the experts had developed automaticity as a benefit of learning the process of their work. In concert with the sentiments of Bryan and Harter, Fitts and Posner (1967) proposed three phases of development of motor skills of experts: (a) the cognitive phase, (b) the associative phase, and (c) the autonomous stage. The learning of a motor skill was initiated during the cognitive phase with the beginner committing multiple mistakes and processing slowly when employing the movement. Following about 50 hours of practice, the performer made fewer mistakes, added depth in understanding of when to use the skill, and needed less thought to execute the action. In the final, autonomous phase, the performer was intuitive in the employment of the skill and demonstrated automaticity in action. During this phase, the performer executed actions with little thought, which allowed the performer to attend to other strategies or environmental concerns.

In the two decades following Fitts and Posner (1967), many studies added more details as to the importance and functioning of automaticity. Posner and Synder (1975) found that automaticity of skill acquisition is central to the development of expertise. Operations that were once slow, rudimentary and requiring high demands of cognition become fast, fluid and less deliberate when automaticity occurs (Schneider & Shiffrin, 1977). Logan (1978, 1979) showed that automaticity dealt with components of tasks, instead of the task as a whole. Theories, such as memory-based theories of automaticity (Logan, 1988a, 1988b; Schneider, 1985; Schneider & Detweiler, 1987, 1988) were also postulated and debated within the literature (Strayer & Kramer,

1990). Additionally, and outside of the theoretical inquiries, scholars started to examine experts' automaticity in various domains.

Bloom (1986) conducted a five year study on the process of talent development of outstanding pianists, sculptors, tennis stars, Olympic swimmers, research mathematicians, and research neurologists. Through this examination of the top 25 individuals in each of the aforementioned fields, automaticity was shown to help individuals in several ways. These aids include, but are not limited to, more economical effort, speed and accuracy in the completion of tasks, consideration of other stimuli while completing actions, and higher functioning, which is necessary for attaining expertise within a domain. Further, Bloom connected automaticity with routines as the way in which experts show fluidity and ease in their performance.

Berliner (1994), in his chapter on instructional expertise, emphasized the automatic nature of routines by teachers. Citing various studies in this review of literature (Glaser, 1987; Carter et al., 1987; Berliner, 1988; Krabbe & Tullgren, 1989; Lienhardt & Greeno, 1986), Berliner made a convincing argument that expert teachers used routines to complete necessary tasks, such as attendance and lesson introductions, while still attending to the cues of their students and the classroom environment. Further, experts continually used repetitive chains of behaviors in order to maintain class organization and teach.

The literature on automaticity described this characteristic of expertise as necessary for the development of outstanding individuals within a domain. Automaticity is fast, fluid, accurate and allows an expert to attend to other stimuli or cognitive processing while completing routine tasks. Moreover, there is a connection between automaticity and routines. Routines are a continuous chain of automatic tasks that experts employ in order to keep organization and move through their work, whether teaching or in other domains. These simple tasks can impact more

complex actions. This understanding of automaticity, as delineated above, is expected to be a characteristic of the participants in this study, as these Olympic gold medalist male swimmers are considered elite or expert in their domain.

Self-monitoring. Schempp et al. (2006) investigated the self-monitoring of expert golf instructors. As one of the elements of experts (Tan, 1997), the researchers sought to "identify the criterion characteristics of professional practice monitored by expert teachers" (p. 26). In other words, this study identified skills, knowledge, personal attributes and philosophy and tools as those components reflected on by experts in order to change their practice for the better. Whereas other research wanted to understand how self-monitoring or self-reflecting helped experts become dominant in their performance, this study describes what experts attended to in order to make the necessary changes to become the best. Although self-monitoring was assumed to be a characteristics of the participants in this study, it was also important to understand what they were reflecting upon in order to achieve their best performance.

Within coaching, Schempp et al. (2006) found that expert golf coaches use self-monitoring to create goals, such as communication, lifestyle, perspective and learning, and actions that "undertook [in order] to accomplish their goals from improving their teaching" (pp. 188). Based upon their assessment, the coaches devised a strategy to better their performance in the future.

Routines and rituals. Expert golf instructors were found to follow a similar pattern of behavior when teaching a lesson. Each session contained an opening, verbal instructions, nonverbal instructions, feedback, positioning, pacing and lesson closure (Baker, Schempp, Hardin, & Clarke, 1998). Besides teaching a skill to a student, the purpose of the routines, these

similar patterns of actions, was to give structure and pacing in which the student and instructor could effectively interact.

Expertise Theory Summary

The literature on expertise theory sheds considerable light on the expected results of this study. From the longer list of characteristics of experts, there are several key attributes that research has shown to be relevant to experts in sport. As delineated above, experts in sport are expected to have an extensive knowledge of their practices, acute perceptual skills, intuition in making decisions, automaticity in the tasks of their routines, flexibility in the structure of their routine, solve problems that arise during the competition, self-monitor their actions as they relate to the success of their performance, and use routines and rituals. Considering that Olympic gold medalists are considered elite by definition (Johnson et al., 2008), it was expected that the participants in this study will demonstrate similar qualities that they relate to these specific characteristics of expertise.

Summary

This chapter reviewed the literature that pertained to the research topic of the current study. Specifically, the review focused on five areas or fields of research: (a) organizational routines, (b) developmental routines, (c) Olympic athletes, (d) routines in sport, and (e) expertise theory. Within the Olympic athlete and routines in sport literature, this study provided the athletes' meanings of their routines as well as an expanded understanding of preparation routines through the competition-day routine theory. Additionally, the manner in which the athletes learned their routines was detailed as well within this literature. Also, the current study added to expertise theory by delineating the actions and nature of routines for elite athletes. The remainder of the literature provided guidance and comparisons for this study's competition-day

routine. Organizational routines provided a theory for future research once the current study described the actions within a routine, while Developmental routines aided researchers in understanding the importance of routines in the lives of athletes. From this literature, the current study has a strong argument for being conducted.

CHAPTER 3

METHODS AND PROCEDURES

The purpose of this study was to identify the action Olympic medalist male swimmers undertook on a competition-day that they believe was critical to their success. The secondary purpose was to understand the meaning these athletes gave to these actions. In this chapter the methods and procedures selected for use in this study were discussed in the following sequence: (a) theoretical framework, (b) role of the researcher, (c) participants, (d) procedures – data collection and data analysis; and (e) data trustworthiness – credibility and reliability.

Theoretic Framework

For the purposes of analyzing performance factors of four Olympic gold medal winning male swimmers, this study defined and described the skills, foci and activities that were necessary for elite performance. To fulfill this purpose, this study used the constructivist grounded theory as the qualitative theoretic framework (Charmaz, 2000, 2006, 2009). Constructivist grounded theory (GT) was an emergent process of data analysis that was a major method in qualitative research (Charmaz, 2008). The tenets outlined by Charmaz (2001, 2006, 2009) as essential for trustworthiness and credibility with this method were as follows:

1. Simultaneous involvement in data collection and analysis. This meant analysis commences at the beginning of the data collection and continues throughout the process. Data analysis and data collection were simultaneous and interactive.

2. Constructed analytic codes and categories from data. Codes and categories "emerge[d]" from the data through the use of specific coding techniques, as were discussed later in this chapter (Glaser, 1978, 1992; Charmaz, 2000, 2006, 2008, 2009).
3. Used constant comparative method. This concept was the heart of grounded theory (Glaser & Strauss, 1967). This process was the continual relating of information throughout each level of analysis. In the early stages, data are compared with data, interviews with interviews, or observations with observations in order to find commonalities and differences (Charmaz, 2006). From these comparisons, categories emerged and were compared with other categories (Glaser & Strauss, 1967; Charmaz, 2000). This analytic process was continual throughout the entire study, from data collection until the writing of a substantive theory, which was the end result (Charmaz, 2000, 2006).
4. Advanced theory development during each step of data collection and analysis. As stated above, the use of the constant comparative method assisted the researcher in developing theory at every level of analysis (i.e., initial coding, focused coding, memo-writing, and theoretical sampling). Each of these methods was used in this study and was detailed below in the "Methods" section of this chapter.
5. Memo-writing elaborated categories, specified their properties, defined relationships between categories, and identified gaps in the analysis. Charmaz stated, "Memo-writing [wa]s the pivotal intermediate step between data collection and writing drafts of papers" (2006, pp. 72). This strategy allowed the researcher to reflect and make connections within and between the data and categories through written notes and ideas. The compilation of these notes begins the drafting process.

6. Sampling aimed toward theory construction. Theoretical sampling pertained to seeking new data from a specified population to explicate the conceptual and theoretic categories (Charmaz, 2006).
7. Conducted the literature review after developing an independent analysis. For the purpose of this study, this was the only principle of constructivist grounded theory that was not completely tenable. The initial literature review, presented in Chapter 1, was limited so as to only demonstrate that there was a need for this study. The remainder of the literature review was conducted for the purposes of discussion following data analysis.
8. Took reflexivity into explicit and continuous account. Reflections by the researcher on personal beliefs, data collection, data analysis, and the research process was essential for constructivist GT. Data were constructed through the interaction of the researcher with participants, symbols, culture and process. To recognize preconceived ideas and/or biases diminished the impacts on data and analysis, allowing for the researcher to create a trustworthy and credible theory (Charmaz, 2006).
9. Used abductive reasoning. Constructivist GT "adopt[ed] the inductive, comparative, emergent and open-ended approach of Glaser and Strauss' classic version" of GT (Charmaz, 2009, pp. 137). Additionally, this method used abductive reasoning. Abductive reasoning was a three step process of rationalizing a surprise emerging from the data (Charmaz, 2009, 2006; Peirce, 1958; Reichert, 2007; Rosenthal, 2004). First, the researcher considered all theoretical ideas that could rationalize this finding. Second, returning to the field, the investigator collected more data to test if this occurrence was true. Finally, if there was sufficient data to support this new idea, a plausible theory was

adopted to account for this surprise. Following these steps led to creative ways to account for life (Charmaz, 2009).

Each of the tenets of constructivist GT was described above. This study fulfilled them through the following strategies: initial coding -- line-by-line coding, incident-by-incident coding, and *in vivo* coding, focused coding, memo-writing, and theoretical sampling (Charmaz, 2006). The definition and manner of execution of each strategy was described later in the Data Analysis section of this chapter.

Role of Researcher

Before explicating the method and design of this study, the role of the researcher must be addressed. Due to the nature of qualitative research, this study's primary investigator was also considered a participant (Patton, 2002). For greater trustworthiness, all experiences in swimming should be reported. The primary researcher was a competitive sub-elite swimmer for 13 years. He coached swimming professionally for five years and was currently a graduate assistant coach for the University of Georgia swimming and diving team. In this current capacity, he coached with the United States' Women's Head Coach for the 2008 Beijing Olympic Games. It is through this relationship that the researcher conducted a study of Olympic medalist female swimmers from the 2004 and 2008 USA Olympic teams and contacted elite male swimmers throughout the United States. All participants were swimmers with whom he has not had a personal or professional relationship prior to this research project.

In addition to experience with coaching and the sport of swimming, the primary researcher had considerable training and knowledge of expertise theory prior to conducting this study. Influence from expertise theory, as it pertained to elite athletes and expert coaches, during data collection and analysis was accounted for through memo writing and reflection. Although

bias as to this theory was impossible to counter, significant effort was taken to reduce the possible influence of prior knowledge of this theory.

Participant Selection

Purposeful sampling was used to select participants according to elite performances (Patton, 2002). An elite swimmer was defined as earning at least one Olympic gold medal, World Championship gold medal, a world record, or a top-five finish in the world at the conclusion of any one year (Johnson, Tenenbaum, Edmonds, & Castillo, 2008). Each participant was an Olympic gold medalist and, thus, fits this criteria. Additionally, the coach of each participant was selected as a key informant for added depth and trustworthiness of the data.

Athletes

The participants included five Olympic gold medal winning male athletes (n=5) competing at the 2010 ConocoPhillips National Swimming Championships/World Championships and Pan Pacific Championships Qualification meet (2010 Nationals). The participants, who total 24 gold, 6 silver, 5 bronze Olympic medals and 55 world records, represented the most accomplished group of swimmers studied to date. Through the professional relationships with both Jack Bauerle, the U.S. Women's Head Coach for the 2008 Beijing Olympic Games, and USA Swimming, the governing organization for swimming in the United States, participants within this narrow sample of Olympic gold medalist male swimmers were contacted and agreed to participate in the study.

Coaches

The coach for each of the five Olympic gold medal winning male athletes (n=3) were interviewed as key informants. Used as a validity check in other studies (Johnson, Edmonds, & Castillo, 2008; Cote, 1999), this procedure verified some details as to the routines and actions of

the swimmers during a competition-day. As with the athlete participants, the coaches within this narrow sample were contacted and agreed to participate in this study.

Data Collection

Following procurement of informed consent (See Appendix A), five qualitative data collection methods were used. These included field notes and/or transcriptions from (a) two-day visitation, (b) initial interview, (c) competition observation, (d) follow-up interview, (e) and a coach interview. These data collection procedures followed well-established qualitative data collection methods (Patton, 2002; Charmaz, 2006, Corbin & Strauss, 2008). Below is a description of each.

Two-Day Visitation

Each athlete was observed at his training site before the 2010 Nationals. The purpose of this visitation was to (a) observe the swimmer during his preparation, (b) conduct the initial interview, (c) become acquainted with the swimmer's competitive environment, and (d) add depth to this study through impromptu, unstructured interviews. The researcher wrote field notes during the observation in the form of condensed notes. These notes consisted of actions and words used by the athlete. The researcher was a passive participant (Spradley, 1980; Patton, 2002). Through this role, if conversations were heard, the words or phrases were recorded through written word. The condensed field notes were converted to expanded field notes following each observation. Data that were not written down during the observation due to time or location constraints were included in the expanded notes along with the words and phrases of the condensed field notes. Additionally, a field journal was kept by the researcher. This journal allowed the researcher to record feelings, thoughts and biases for the express purpose of reducing subjectivity during data collection, data analysis and manuscript writing. The specific data

collection methods for each interview are described below. The primary researcher had access to all activities during the two days.

Initial Interview

This audio-recorded semi-structured interview investigated the competition-day activities when the participants won their Olympic gold medal(s) (see Appendix B for interview guide). After athletes described their activities, an inventory of actions identified the necessary competition tasks completed and valued by the athlete. The interview was audio-recorded and transcribed for analysis.

Competition Observation

Each swimmer was observed throughout the competition for one preliminary and finals session of the 2010 Nationals. The competition observation occurred from August 3-7, 2010 at the ConocoPhillips National Championships in Irvine, CA. This meet hosted the second largest concentrations of world-class swimmers during the 2010 calendar year. This meet was chosen based on its status, convenience and cost. The primary researcher obtained access to all activities during the meet through a coach pass provided by USA Swimming. The focus of this competition observation was the activities of the athletes on the day of competition. Written field notes were collected by the principal investigator.

Follow-Up Interview

This second semi-structured interview was audio recorded and conducted via telephone within two weeks following the competition observation (see Appendix B for interview guide). The focus of this interview was to examine the activities observed at the meet and define the necessary competition tasks determined in the initial interview.

Coach Interview

The coach of each swimmer spends countless hours watching and witnessing the training and competing of their athlete. Each participant's coach was interviewed. This semi-structured interview focused on their perceptions and accounts of significant events in the swimmer's careers (see Appendix B for interview guide). As a key informant, their willingness to shed light on these events will provide a cross-check for information provided by their athlete as well as a source for further inquiry during the follow-up interview (Graber, 1991). These interviews were audio recorded and conducted either in person during or via phone following the two-day visitation.

Data Analysis

Interview data were transcribed and the transcripts analyzed along with the two-day visitation and competition observation field notes. The data were summarized and synthesized to identify both the pattern of actions and the meaning of those actions taken by the participants on a day of elite competition. The theoretical frameworks of Ground Theory (Charmaz, 2000, 2006) provided the main perspective for data analysis. Specifically, the primary researcher conducted initial coding -- line-by-line coding, incident-by-incident coding, and *in vivo* codes, focus coding, and memo-writing in order to produce a substantive grounded theory. Each of these strategies was explicated below.

Before delving into the coding strategies of constructivist GT, one clarification of coding practices needed mention. In the following paragraphs, the coding strategies were presented in a chronological order. Terms like "begin," "finish," and "following" signaled the commencement or conclusion of a strategy, one coding procedure following another. In constructivist GT, a researcher moved between coding strategies fluidly, comparing data, codes, and memos seamlessly. One might be in the initial coding strategy for one transcript and an idea propelled

the researcher to return to focused coding procedure in another document for comparison. Thus, the description before should not be misleading in its simplicity nor understood as a linear step-by-step procedure to be followed in this study.

Initial Coding

This step began data analysis. Through this comparison of data with data, the participants' views and treatment of the necessary performance factors initiated the formation of categories based upon the suggestions, points of view and pronouncements of the athletes (Charmaz, 2006). Reflection upon the data started with the words that demonstrate action (Charmaz, 2006). Coding the data as action reduced conceptual leaps and early formulations of theory. The codes that emerged were "provisional, comparative, and grounded in the data" (Charmaz, 2006, p. 48). They were open for more interpretation and revision. Three types of coding techniques were used in initial coding: (a) line-by-line coding, (b) incident-by-incident coding and (c) *in vivo* coding.

Line-By-Line Coding

Line-by-line coding was a corrective technique that reduced superimposing preconceived notions on the data during initial coding (Charmaz, 2006). During this coding, the data was read one or two lines at a time. The researcher looked for detailed observations of people, actions, and settings that revealed visibly telling and consequential scenes and actions" (Charmaz, 2006, p. 50). Following the reading, a gerund that succinctly characterized the occurrences in the text was written in the margin of the document. This type of coding was employed in the initial coding of the interview transcriptions.

Incident-By-Incident Coding

Incident-by-incident coding is "a close cousin of line-by-line coding" (Charmaz, 2006, p. 53). This strategy used gerunds from line-by-line coding within each incident in order to identify those major categories that characterize the actions and meaning of the event. Incident-by-incident coding works particularly well with observation notes and will be utilized for analysis of those documents in this study.

***In Vivo* Coding**

One special case coding was *in vivo* coding. During *in vivo* coding, the primary researcher took the words, e.g., colloquialisms that possessed socially significant meaning in a condensed form (Charmaz, 2006). These general terms known by people within the culture, were innovative terms that expressed experiences or meanings and provided an insider's shorthand that conveyed a particular perspective (Charmaz, 2006). These terms were either distinct to the participant's culture or borrowed from outside the social context with an applied, new meaning. In both cases, *in vivo* codes characterized the "social worlds and organizational context" of the individual or the social group (Charmaz, 2006, p. 56). This study sought the condensed meaning and actions that *in vivo* codes provided.

Focused Coding

The second major phase of analysis was focused coding. Once strong analytic connections were constructed, focused coding took the most frequent and/or meaningful codes in order to sift through large amounts of data (Charmaz, 2006). This required the researcher to select codes to follow through the data and to act upon the data by reading the text closely, looking for events, perspectives and interactions. The data-to-data coding produces focused

codes against which more comparison of these codes to the data creates the refined categories. Once focused coding was finished, memo-writing began.

Memo-Writing

Memo-writing, the third major phase of analysis, was the step between codes and theory. Writing memos allowed researchers to analyze their ideas and codes in earlier analysis and

> provide[d] space to become actively engaged in [the] materials ... [by] making comparisons between data and data, data and codes, codes and data and other codes, codes and category, category and concept and for articulating conjectures about these comparisons" (Charmaz, 2006, pp. 72-73).

The constructed analytic notes fleshed out categories or explained the meaning of the actions. Two types of memos were written during this process. First, as described above, the primary researcher wrote memos throughout the analysis process. By writing these memos, the completeness of a category was revealed and, if necessary, the researcher returned to data in order to fill in missing connections or information. Second, a final synthesis memo was produced (See Appendix C). The purpose of this document was to synthesize the major themes into a composite day of competition and summarize the data, e.g., actions and meanings described and observed into a descriptive narrative. This synthesis memo helped the primary researcher connect the themes, notice any gaps in the data, and produce a collective story to serve as a reference during manuscript drafting. Once categories were complete and the synthesis memo was written, the core of the grounded theory was formed, the manuscript drafting began and analysis, at least for the time being, ended.

Trustworthiness

Trustworthiness is a hallmark of quality in a qualitative study (Patton, 2002; Seale, 1999; Guba & Lincoln, 1987). Demonstrated through the competent use of established verification procedures (Patton, 2002), trustworthiness gains the reader's confidence based on the accuracy of the description of the participants and their context (Graber, 1991). For this study, triangulation, key informants and member checks enhanced credibility and accuracy.

Triangulation

Triangulation was the overlapping of methods so that the maximum validity of field efforts emerged (Denzin, 1978). It improved credibility of the study by preventing the likelihood that the investigator's initial impressions influenced the findings from the study (Graber, 1991; Glaser & Strauss, 1967). In this study, multiple participant interviews, e.g., initial and follow-up interviews, and observations, two-day visitation and competition observation, were used as triangulation methods. More specifically, similar and specific questions from initial interviews were re-asked in order to check for and demonstrate dependability and accuracy in the data. Similarly, statements provided by participants regarding their actions were compared with observations for further reliability and trustworthiness.

Key Informants

Key informants were individuals with specific, credible information regarding the purposes of this studies. The coaches of each of the swimmers were recognized as individuals with insight into the training, preparatory, and competition-day actions of the Olympic gold medalist male swimmers. Each coach was interviewed in order to help verify or contravene the testimonies of their swimmers. The key informants of this study also added to dependability and accuracy of the data.

Member Check

Member checks or member validations were “the most crucial technique for establishing credibility” (Lincoln & Guba, 1985, p. 314). This study incorporated both “weak” and “strong” approaches to member validation by asking members to judge whether the raw data in the interview transcripts and initial analysis depicted their insights and comments accurately (Boor, 1997). Once the member checks were complete, final analysis was conducted and results prepared for manuscript.

Within qualitative research, especially from a constructivist’s point of view, credibility, transferability, confirmability were the additional distinctive features of quality and trustworthiness (Denzin & Lincoln, 2005). By using the methods described above in accordance with established procedures, credibility was achieved. Transferability was accomplished because the setting for each participant was contextualized in an individual sport consisting of clear and objective competition practices that are consistent among all distances and disciplines in Olympic and United States Swimming sanctioned events. The data collected from each swimmer was then substantively the same and comparisons could be established. Finally, through description of the methods and procedures in this chapter; other researchers will be able to replicate this study with similar athletes. This will allow confirmability.

CHAPTER 4

DESCRIPTION AND ATTRIBUTES OF A COMPETITION-DAY ROUTINE

The purpose of this study was to investigate the actions taken by Olympic gold medalist male swimmers during an elite competition. Using grounded theory, the current study provided a substantive theory regarding the competition-day routine and its meaning to these elite athletes. The purpose of this chapter was to report the descriptions and attributes of a competition-day routine for elite swimmers that resulted from analyzing the collected data. To this end, this chapter was divided into two sections: (a) competition-day routine actions, and (b) attributes of a competition-day routine. Each of these areas was presented based upon data and then discussed in light of previous research in areas related to the issues addressed by this investigation.

Competition-day Routine Actions

Through the use of qualitative semi-structured interviews, each swimmer provided a detailed account of what actions they took during both their Olympic gold medal winning day and their observed elite competition-day. The athletes' routines were almost identical. Similar acts and sequencing were said to be what they do at all their meets, time permitting. Additionally, when observed by the primary researcher at an elite meet, the participants in this study performed the tasks identically to their description. Table 4.1 presented a summary of each of the competition-day routines of the participants based upon data.

Table 4.1

Elements of a Competition-day Routine

Name	Elements from Data
Aaron	"[Q] Your routine seems to be **wake up, go to breakfast, go to the pool,** *stretch,* **warm-up, you relax, stay comfortable,** you get a *second warm-up,* **you go to the ready room, you swim, warm down,** take a nap in the afternoon, and *repeat.* Is that right? [A] Yeah. That sounds all right."
Garrett	"[Q] So the important parts of your routine are basically **wake up**, wake up swim, **breakfast**, chill, **go to pool, chill out**, *warm-up,* chill out, **race, warm down**, chill out, go home and *repeat.* is that it? [A] Basically."
Peter	"[Q] If I describe your routine, **you get up, you eat, you go to the pool**, *you stretch*, **you warm up, you relax**, *you warm up*, **you go to the ready room, and race**. Is that it? [A] Yes."
Ricky	"**Wake up**, wake up swim if I want to (chuckle), come back, **eat breakfast,** go to the hotel room, put some headphones on, pull my legs up on the wall, listen to music until **I leave for the pool**, I leave for the pool about two hours before the race, dive in the water probably about an hour and 15 to an hour and a half before a race, **warm-up** for about 45 minutes, I like to get out of water 30 to 45 minutes… I like to get out of water an hour before race time, 45 minutes to an hour, *go to shake* about 30 minutes before race time, for my suit on, *jump back in the water about 20 minutes before the race,* **and then in the ready room**. I'm in the ready room… see I don't do much thinking in the ready room. Usually I feel like the ready room for me is that time when I kind of socialize, that's kind of my mental break actually. **I try to get pumped up in there and relax and go do the race."**
Ryan	"[Q] So your routine is basically **get up,** get a shower, **breakfast, go to the pool,** *stretch,* **take a break to change, warm-up, take an hour off,** jump around a little bit, go to the blocks and **race**, and **warn down** and *repeat,* is that your routine? [A] Yes."

Note. Bolded words are those elements described by all participants. Italicized words are those element described by at least three or four participants.

Commonalities, bolded in the table, were: (a) wake up, (b) eat, (c) leave for venue, (d) warm-up, (e) relax/stay comfortable, (f) go to ready room, (g) race, (h) warm-down, and (g) repeated. This last facet, although not stated in the interviews, was found to be consistent with all swimmers during observation. The routines were predictable through sequence, timing, and actions. Most of the athletes, at least three of the five, stretched upon arrival to the venue or warmed-up a second time before going to the ready room. Therefore, from the data, there was a clear pattern of behavior.

This type of consistency was similar to studies of Olympic athletes within specific sports (Orlick and Partington, 1988; Gould et al., 1992a). These studies denoted the existence and importance of routines on competition-days, but not the actual actions taken by participants. The specific details of the routines were not disseminated by Orlick and Partington (1988) and Gould et al. (1992a) possibly due to the focus of the study. The present study added detail to routine sections of these seminal works both in this brief description as well in the next three sections: attribute, purposes and by-product of a competition-day routine.

Attributes of a Competition-day Routine

Based upon the data analysis, five attributes of a competition-day routine emerged. These major themes were (a) flexibility, (b) adaptation, (c) automaticity, (d) time management, and (e) task acquisition. Each attribute was a distinct facet of a competition-day routine. However, considering the fluidity of the actions and interplay of these characteristics, which allowed the participants to negotiate obstacles during an elite competition, these attributes also interacted in a manner that allowed these Olympic gold medalists to be prepared to compete at an elite level. Therefore, each of the attributes of a competition-day routine, along with discussion of the meaning of the theme, will be presented. This was followed by an examination of the

interaction of these attributes. It must be noted that although the attributes are presented in a sequential order, this did not imply a rank order by which one should be seen as more or less predominant or important over another. Beginning with flexibility, the remainder of this section will proffer adaptation, automaticity, time management, task acquisition and interaction of attributes.

Flexibility

Four of the five participants in this study did not acknowledge having their own pattern of behaviors, or routine, during a day of competition. Aaron said, "I almost think routines can be … I really don't have one." In concert with this sentiment, Ryan, when asked about how his sickness on the first day of his 2008 Olympic Games affected his routine stated, "I don't really have a routine so [being sick] didn't really change anything." Or as Peter stated, "I'm not superstitious. I don't have a set routine and I try to keep it that way because things change and I don't want to be in a position where say something happens where I pushed out of my routine and I can make adjustments." And yet, by the end of the data collection, when asked what their routine is on a race day, everyone gave a specific description or confirmed a recounting of their competition-day routine. This seemingly large paradigm shift from not having a routine to having a consistent, sequential pattern of behaviors or actions was due to the participants' changing their view of a routine from strict to flexible. In other words, the athletes did indeed have recurring and consistent patterns of behaviors (i.e., routines), but they did not see these patterns as routines because to them, this sequence of actions was not strictly prescribed, but accommodating to the situation at hand. This important attribute of flexibility not only described the type of routine, but, as the data showed, allowed the participants to understand what they did as a routine.

The participants tended to define a routine as a prescribed order of events within the day that must be strictly adhered to in order to be successful. For example, during data collection, when the athletes in this study described the routine of others, they tended to point to the negative consequences when competitors did not adhere to their specific, strict routine.

> I almost think routines can be … I really don't have one, but they can be amazing and they can be great but they can hurt you too. I'm not sure that what I do is necessarily any better it's just, you know, I don't freak out if shit doesn't go my way really. I know people that that does happen to them ... You know, you know our national team [members] now have really good heads on their shoulders. They're usually pretty good. I mean, you'll talk to Peter and he's a pretty relaxed guy, it doesn't take much to faze him. And so is Lochte ... and the others guys, they're easy-going. They have routines? Maybe" (Aaron).

> There's a lot that goes on on race day and if you are a person that sticks to a strict schedule race after race day and something does get screwed up, I mean,… the more you stress about it the more you screw up or something's going to happen (Ricky).

The participants noticed that others got uncomfortable or lost concentration on what they were doing when their routine got off track. Since the athletes in this study tended to make adjustments to any situation that arose in order to avoid the same negative consequences they saw in others, what they did on a day of competition did not fit this strictly prescribed routine definition. In other words, the elite athletes in this study saw themselves, if they admitted to having a routine, as having a flexible pattern of behavior.

Ricky spoke directly to his understanding of a routine as being prescribed and his routine as being flexible when he said, "I do have a flexible routine though ... I'm not one to get screwed

up ... or mentally fall apart if my routine is messed up." Peter also sees his routine as flexible, after denying he had a routine. "I meant that I try to stay flexible. I don't get worked up about how I feel in warm-up, timing, if I'm earlier or later to the pool that I would like to be, I just kind of go with the flow and do not worry about it" (Peter). Both Peter and Ricky added the descriptive adjective "flexible" to the term "routine" in order to make a distinction between what they perceived the general definition of routine to be and how they viewed their pattern of behaviors.

This understanding of flexibility in a competition-day routine was exemplified in a discussion of specific warm-up tasks. Most of the participants, when asked as to what they do to warm-up, stated that they did not have a set warm-up and did whatever they felt like their body needed to get ready to race. However, when pushed to name the elements of their warm-up, the swimmers named the acts and sequencing of their warm-up.

> No. I have a general idea, you know, but I don't know exactly how I'm going to do it. I'll know, I'm going to swim for little, kick for little, and drill for a little, I'm going to kick underwater for a little bit, I'm going to scull for a little bit, I'm going to do a couple build 25's maybe, maybe swim for a little bit, maybe kick for a little bit, do a 50 faster build, who knows, honestly? It's just kind of how I feel. If I don't feel good, I'll keep warming up. If my legs don't feel good I'll kick a little more. If my hands don't feel good I'll scull a little more. I'll go anywhere from 700 to 2000 (Garrett).

This detailed accounting included very specific actions, such as kicking, sculling, drills and speed work. The only facet not described was the distance of each element because that was completely reliant on how his body felt. This type of description was common among most of

the participants and points to the flexibility of completing tasks within a routine. If asked if they have a routine, the initial answer is "no." However, when pressed for elements, that was the essential parts of a specific task, then these elite athletes had no problem chronicling their sequential order of actions, i.e., routine. Therefore, not only was the competition-day routine of elite swimmers flexible, this attribute was also the essential part of the definition.

The tension between how the gold medalist initially defined routine (strict) and how they perceived their routine (flexible) reflected the similar friction between the conceptual and empirical understandings of organized routine theory. The athletes' conflicting definitions of routines lent support to Feldman and Pentland's (2003) contention that there were ostensive and performative aspects to routines. In the present study, the athletes rejected the traditional notion that a routine was strict, inflexible, bureaucratic, and mindless. This type of routine was seen as negative. Instead, the participants accepted that they had a general plan for their routine, i.e., ostensive aspect, but found greater significance in their ability to be flexible and adapt their routines based on the people, place and time of the meet. Additionally, the present study added insight into weight of the performative aspect over the ostensive in performance, especially athletic performance.

As stated in the discussion of the flexible routine reported by the participants of the current study, adaptation of the routine based upon the people, place and time of the meet was seen as necessary. The ability of these elite athletes to change their preparations based on the situation, i.e., adapt, is a characteristic of an expert (Ericsson & Lehmann, 1996). As stated in the literature review of the present study, Olympic gold medalist meets the criteria of an elite athlete (Johnson et al., 2008). In agreement with Berliner (1994), who asserted that an expert, or elite athlete in this case, had the ability to shift their routines to accommodate the situation, these

athletes were able to adjust to situations and self in order to perform at the highest of levels. In the next section, the specific examples of adaptation of the competition-day routine to the environment and self were presented.

Adaptation

As stated above in the discussion of flexibility, participants described and defined their competition-day routine similarly to Feldman's and Pentland's performative aspect of organizational routines. Within organizational routine theory, a routine's performative nature was characterized as "inherently improvisational" and changes were "situated in a complex context ... [and] sensitive to features within the context" (Feldman & Pentland, 2003, p. 102). This insight into the adaptability of a routine by agents performing the routine also aligned with the participant's depiction of necessary changes to their pattern of actions or routine. In describing adaptations made to routines during competition days, the athletes reported two factors requiring modification: a) environment and b) self. To explicate both these aspects through descriptions and discussion, this section was divided into two divisions. First, there was an investigation of adaptation to the environment, which was when the participants needed to adapt to the circumstances that they have no control over. Second, the swimmers' ability to adapt to the way their body felt or to self was examined.

Adaptation to the environment. No two competitions were ever the same in any sport. Locations, time zones, time of day, organizational structure, number and quality of participants, or any number of other factors influenced how events were sanctioned, organized and produced. Swim meets were no different. The environment of the swim meets change, or, as Ricky said about being given advice by his coach at the Olympics, "Something's going to screw up today. Just be prepared for it and when it happens just take a deep breath and you'll be fine." For

instance, when given a scenario of arriving late to the venue, Aaron and Ryan said they would each make a quick contingency plan, one that followed their normal routine, and adapt to the situation the best they could.

> If I showed up late I would get in and do what I could with the amount of time I have… I mean you would do the best to warm up in the amount of time that you have go out and race the best you can, see how you feel" (Aaron).
>
> Even in the worst-case scenario ... [if I] only have 10 minutes before my race, ... I would probably, most likely, go over a five-minute stretch and do some drills.
>
> And then I would do a couple of bursts and then I'd be ready (Ryan).

In both cases, the participants knew what they needed to do to get ready; they followed their routine to the best of their ability, and were prepared for their performance. The flexibility in their pattern of behaviors would allow them to adapt to a problem because they could stay calm and focused on what preparations were able to be completed before the start of their race.

In a recent example, Garrett talked about his USA caps being misprinted for the most recent Pan American Games, which occurred just before his follow-up interview. He wanted the American flag and his name printed on silicon dome caps instead of the latex caps because the silicon caps were "much faster than the old latex caps." However, due to the mix up with the printing, Garrett had to swim with the older designed latex caps. This unforeseen problem was, in his mind, a major change to his environment; he was not being able to use the fastest equipment during this elite meet. Garrett allowed himself the time to deal with the problem emotionally, since he was now upset, before he returned to his routine, which resulted, in a relatively short time, him being relaxed and focused. His routine was adaptable to his needs. He had the time and energy to deal with the problem and move on.

Ricky made a similar adjustment at 2010 Nationals when the athletes were required to submit to a suit inspection immediately prior to reporting to the ready room. USA Swimming, the organizers of this meet, made each swimmer submit to a suit check 20 minutes prior to the start of their races. This was an officiating decision to make sure all suits in the races were legal. This resulted in each swimmer having to adjust their routines to fit the meet schedule. As Ricky stated, "that's normally time when I'm usually either changing my suit or jumping back in the water" for his second warm-up. Observations of Ricky during the meet demonstrate this change to routine in comparison to the interview data in which Ricky described, in terms of time management, when he completed different tasks. The variance in that description and the observation supported the change in routine due to this suit check. This change to his routine was predicated by the meet organization, something outside of his control. It was environmental. Ricky was able to adapt to this unforeseen requirement prior to the event because his routine was flexible. Ricky stated that he was annoyed because he had to sit in the heat for twenty minutes in the ready area, when he could be in the water. He adapted flawlessly and completed his goal for the meet; he made the USA Pan Pacific Games team.

In the examples above, when adaptation to the environment was discussed or observed, the participants recognized cues from their environment and made adjustments, or adaptations that permitted them to both emotionally and physically follow their routine. All the athletes in this study demonstrated the ability to adapt to their environment as necessary. As Peter stated when asked whether the skill of adaptation was imperative:

> It's very important. [The ability to adapt] is very important because you never know what might happen. Say a suit rips or you feel sick or something else happens to somebody else. There are any number of things that can happen that you have to be prepared for.

> The bus gets a flat tire going to the venue. You have to be flexible and you can't let that stuff affect you. As long as you are aware of that they'll be fine.

Four of the five participants agreed with this assessment in near identical sentiments, e.g., "Yes, it's very important for any swimmer" (Ricky).

Beyond the significance of acquiring and using this skill, the swimmers believed this ability to adapt to their environment allows them to be successful. Garrett described this sentiment of how he uses his routine to adapt by stating:

> "I don't think it throws your routine off, I think it changes the routine a little bit. I think the location to where you're going is the same, the route that you're going to take is a little bit different, which is fine. ... You know, a good friend of mine used to say that we train so that even on a bad day we can still win."

The routine was adapted to fit the situation and the swimmers moved on in their routine. The slight change to the routine only moved them back on track and on to the next task they needed to complete in their preparations.

Additionally, these athletes were "preparing [themselves] for the worst" (Ryan); that was, for unforeseen obstacles or problems. Through this preparation, whether through trial and error or in pre-competition planning, these elite swimmers were emotionally ready to deal with encountered problems. They had a plan that worked and served them in their preparations for their race. Unlike other swimmers who used a strictly prescribed routine and did not cope well with a change to their schedule, the participants in this study stayed positive, only allowing themselves a few minutes to deal emotionally with the new situation, and then continued with their routine. This ability was a learned skill that leads to positive outcomes. "Part of the point of training is to be able to adapt yourself and cope with problems so that you can do things in a

high level even when you don't have everything" (Garrett). Through their experiences in practices and at meets, these athletes turned a negative situation into something positive due to their ability to adapt.

Adaptation to self. Almost all the decisions made by the participants in this study were based upon how their body felt and what they needed to do in order to swim their best. More specifically, most of the elite swimmers adapted their warm-up, whether at the venue or during their wake-up swim at the Olympic Village, based upon how they were feeling.

> "It's just kind of like whatever I feel like doing. If I feel like kicking a little more because my legs need to be a little warmed up then I'll kick a little more. You know, if I want to scull a little bit more because I need some feel in my hands, it really just depends on what I'm feeling, I guess." (Peter).
>
> I normally set off, starting out, with a 500 swim and a 400. Depending on how I feel,… if I'm feeling good after I start… I go 500 swim, 400 kick, 300 kinds of drill and stuff. If I'm starting to feel fine, like better in the water, I'm ready to do a couple of 50s build and do the pace and stuff, I'll just go ahead and get into it. The whole thing about warm-ups is just swimming until you feel good ... So, normally I'll start off with a 500, 400 and depending how I feel, I'll cut some stuff out (Ricky).
>
> "You know, you just kind of get to feel how your body is and how it's going to react to the whole day. How much warm-up you're going to need to do, kind of getting a feel for what's tight and what you are going to have to work on… (Aaron).

The only participant who did not change his warm-up swim was Ryan. He only changed what he swam before his race based upon the specific events he was swimming that day.

However, like the other athletes in this study, he made adjustments to his routine based upon how his body felt.

During the observations of the participants at an elite swim meet, the principal investigator noticed that each athlete sat during most of the time between their initial warm-up and their getting ready to go to the ready room, their downtime. When other swimmers were standing to watch the finish of a close race, these elite swimmers stayed seated. In order to understand this phenomenon, each participant was asked the reason for sitting during most of the swim meet. Each athlete described that decision as being based on how their legs felt. “That’s probably, it could’ve been a number of reasons [why I was seated], I just wanted to sit down and stay relaxed or my legs were tired and I didn’t want to get my legs too tired before I went over there” (Ryan). Although several mentioned that they were told to remain seated by their coaches throughout their career, the decision was based on what their body was telling them they needed.

The ability to adapt to self was so important to these elite swimmers that if the athletes felt as though something would help them feel better physically, they added that task to their routine. When asked if he stretches, Garrett said that normally, he did not. However, “If I feel tight I will” (Garrett). The major consideration, and product, of a competition-day routine, was to stay calm and comfortable. If adding stretching, warming-up differently, or sitting down allowed the participant’s body to stay comfortable and perform at their highest level on that day, the participants adapted their routine in order to accommodate what their body told them.

The ability of these Olympic gold medalists to adapt to specific environmental and personal changes during an elite meet allowed them to be successful. This was similar to the conviction that the agency of the individual within a routine, i.e., the ability to adapt the tasks of the routine to a specific situation, was paramount within the empirical data of organizational

routines (Feldman & Pentland, 2003). The exclusion of agency by the conceptual, traditional organization routine theory was rejected by these researchers as empirical evidence demonstrated the necessity of the individual in the routine to make effortful accomplishment through the decisions made in order to complete tasks. The present study, albeit focused on individuals within a routine, found that these elite swimmers constantly adapted to their environment and self to be successful. The ability to make adaptation, to remain flexible, may be due to specific characteristics of expertise: automaticity. In the final part of this section, automaticity within a competition-day routine will be described.

Automaticity

Automaticity was defined as actions, performed fluidly and accurately, that used few cognitive resources and were learned over time (Glaser, 1987, 1990). Within the current study, the actions performed for the completion of tasks within the competition-day routines were found to be automatic. These competition-day routine tasks of the elite athletes were performed over and over again until they became second nature, that is, completed smoothly, precisely and without much thought. As Garrett summed up when describing his competition routine:

> If we do something over and over and over and over we become more comfortable with it and we do a certain routine and we've become successful doing that routine, we become confident that if we do the same routine ... So if you have a routine, things that you're going to do for sure then you have tasks that you have to do and just continuing to do those tasks will help you, I guess, stay focused and stay calm (Garrett).

This automaticity of the competition-day routine resulted from repetition, over a long period of time. Many of the athletes followed a similar routine for five to ten years. The advantage of this repetitiveness was that the athletes did not have to think much about the next preparatory task.

As discussed in the flexibility part of this section (see above), Ryan and Aaron both knew exactly what they needed to do upon arrival, even if they showed up with only 10 or 15 minutes before their race. They had a set plan that was adaptable. They did not have to wonder what they were going to do; they just did what came automatically to their process. In other words, each of the swimmers knew exactly what tasks needed completion when they got up that morning, when they arrived at the pool, and as they performed each detail of their routine. "[My routine] comes pretty automatic. Yep, by now, absolutely. I feel like on a race day I'm pretty well set" (Aaron). This resulted, as Garrett stated above, in the athletes being able to remain calm and relaxed because they knew that they were prepared to race based upon the fulfillment of their routine.

Automaticity also requires low amounts of cognitive energy for task completion, which allowed participants to continually monitor other stimuli around them or in their environment. This resulted in less thought regarding their actions and more about what is happening around them. This phenomenon was demonstrated in the inability of the participants to recall specific details of their routines such as sequence or the order in which actions were taken in order to complete a task. For example, when Ryan was asked if he had a specific stretching pattern before warming-up, he stated, "No, not really, I just keep stretching until I feel really loose and relaxed. So, I do that for like 20 minutes and I get in. I do my normal meet warm-up." However, during his observation at an elite swim meet, Ryan was noted as stretching in the same pattern after he arrived at the pool and before jumping in the water for warm-up. When asked about this, Ryan stated that he "started stretching when I was a freshman in college. We had a team stretch and everything ... I did the stretch because the team was doing it ... [now I do it] because I'm used to it, yeah, I mean, I'm just used to it. I just kind of follow that routine." In

other words, Ryan did not recall specifics of his stretching routine because he had completed the task so many times that he did not think about what he was doing. Instead, he concentrated on these actions of stretching, but instead attended to other occurrences around him. When Ryan spoke about what he thought about during his stretching routine, he answered:

> I mean so many things are going through my mind. I like to… when I go to the pool and I start stretching I like to look at the pool and maybe for a brief second, I don't know, I'll just… I think about, who knows what, something about swimming. I get my focus and towards the meet ... I always stretch with music in my ears just because like that's the only time I really want to listen to music is when I'm going over to the pool and when I'm stretching and I take it off and I don't put it on until Finals. It relaxes me. I don't think about anything, I just go with the music and do my stretch, yeah.

Ryan began thinking about the swim meet and his performance or relaxing with music in his ears. He attended to his mental preparation or state of arousal. Additionally, Ryan was also very aware of others around him.

> I always get interrupted because people, I don't know, take a picture or other coaches or swimmers want to talk to me. So, of course, I'll always talk to them or take a picture. For the most part I would rather be left alone and let me do my own thing ... Oh, no way. I mean nothing bothers me. I love it. But I just prefer to be left alone. But it makes no difference if I do or don't.

As was observed during the 2010 Nationals, Ryan was constantly being interrupted by others around him during his stretch. He kindly took off his headphones and talked, took pictures or signed autographs. Then, he went back to stretching. He was not focused on his stretching in

the sense that he was processing each action, instead he was attentive to both how he felt as well as those events happening all around him. He still completed his tasks of preparation and he stretched until ready to get into the water for warm-up, and all without much thought about how or what to stretch. Additionally, like the other swimmers in this study that made adjustments to their routines through adaptation, the automaticity of action allowed for attending to the atypical. As in this situation of signing autographs or talking with other swimmers, Ryan was aware of changes around him.

In addition to the comments of Ryan, Peter described talking with others while stretching at the Olympics when he stated:

> Yes, and maybe a little bit of stretching, your hamstrings get stretched. I remember getting that done a lot. And just talking to them. Of course I got there extra early the day of the race. So, I spent a lot of time just sitting around talking to the staff, coaches, some of the other athletes that swim that day. I did my warm-up (Peter).

Again, Peter was aware not only about the type of stretching and area being stretched, but, within this part of this routine, talked to others that were near him. In a similar situation, Ryan and Peter both spoke about being interrupted by swimmers and coaches during their stretching routines. Both were fine with spending time talking with others because they could attend to both stretching (little cognition) and talking (more extensive use of cognitive resources). Through the interviews and observations, the participants were noted as being automatic in most, if not all, the tasks within their competition-day routine.

The data analysis showed that these elite athletes had automaticity in their actions. This was expected based upon expertise theory. Using this theory as a foil, three key characteristics

of automaticity were matched to expertise theory (Simon & Chase, 1973; Bloom, 1985; Berliner, 1994). First, actions performed repeatedly over time, were said to be completed fluidly and accurately. Second, automaticity did not require extensive cognition. Third, automaticity allowed experts to attend to those events, people and situations that were occurring all around them. In addition to the notion of automaticity in expertise literature, the athletes also demonstrated attending to atypical situations. As traits of experts or, in this case, elite athletes, the participants in this study demonstrated aspects of automaticity and attending to the atypical in their competition-day routines.

Time Management

The entire schedule of the swimmers' routines revolved around two factors: (a) when the swimmer's race was scheduled to begin and (b) how long each element in their routine took to complete. When asked about when to arrive at the pool, each participant calculated when they got to the pool by how long they needed to complete their competition-day routine before the race started. Ricky exemplified this computation of arrival when he recounts his routine;

> Wake up, wake up swim if I want to (chuckle), ... listen to music until I leave for the pool, I leave for the pool about two hours before a race, dive in the water probably about an hour and 15 to an hour and a half before a race, warm-up for about 45 minutes, I like to get out of water 30 to 45 minutes… I like to get out of water an hour before race time, 45 minutes to an hour, go to shake about 30 minutes before race time, to put my suit on, jump back in the water about 20 minutes before the race, and then in the ready room.

All the participants planned to arrive between one and a half and two hours before the start of their race. This way they can get in for warm-ups "probably about an hour before the

race ... be in for about 20 minutes, thereabouts, you know, I have to give myself this much time so I can put my suit on. I have to work on some kind of schedule now or I get disqualified or something" (Aaron). The consistency of the timetable between participants was interpreted as significant.

Time management allowed the participants to calculate their timetable for the day based on how long each tasks took to complete. In most cases, the participants in this study knew to the minute how long each of their tasks on competition-day took to complete. As quoted above, Ricky knew to the minute how long each of his tasks took when calculating when he should arrive at the venue. Echoing that kind of task knowledge, Ryan knew how long his stretching would take uninterrupted, "12 minutes," as well as interrupted, "15 minutes." Following 10 to 15 minutes of getting ready to warm-up and jumping in the water, his warm-up took 26 minutes. Garrett demonstrated the most extreme case of scheduling prowess. He remembered that he got up at 6:23 AM because "I always get up at odd times, random numbers, because ... it takes me a certain amount of time to do certain things in the morning ... I know how long it takes me to do stuff and so that's kind of how I wake up. So woke up at 6:23 AM." This skill estimating time was viewed as crucial to adapt to an unexpected change in schedule (See Adaptation above). In other words, "My routine revolves around how much time I have and how fast I get through it so being late to the pool, you know, I just can't speed everything up ..." (Peter). But, by knowing the length of time until the race and what needs to be done, a contingency plan was made. If the swimmer arrived late, as Peter stated, "I don't like let it affect me" because he, like the other elite swimmers, uses his time management skills to prepare for his race.

Time management also helped the participants to relax or remain calm, which is one of two purposes of a competition-day routine. As was presented above, each gold medalist knew

exactly what tasks needed to be completed, the amount of time each activity took, and, in worst case scenarios, what adjustments could be made to their routine in order to be prepared for their race. If time was short and adaptation was needed, these elite athletes knew exactly what to do, how much time to devote to those activities, and when to stop and go to the ready room. Time management, the ability to know exactly how much time each task took in both the best and worst of scenarios, aided in the relaxation or calming purpose of competition-day routine.

The attribute of time management was directly addressed by Orlick and Partington (1988) in their presentation of a pre-competition plan. In their description of the pre-competition plan, a quote of these Olympic athletes stated, regarding their warm-up, “We have a set warm-up, we know exactly how much time it takes and exactly what things we’re going to do” (pp. 115). This was consistent with the time management skills of the athletes in this study. Further, these athletes added to the literature by expanding this understanding of time and tasks to the entire competition-day routine.

In addition to this agreement to Orlick and Partington (1988), the description of time management supported the importance of agency and effortful accomplishment. These gold medalists used time management to make decisions that affected the adherence to those tasks of the competition-day routine. Based on the amount of time until the race and the amount of time needed to complete tasks, the athletes made decisions to change or not change their routine.

Task Acquisition

The acquisition of the tasks used on a day of competition at an elite meet was achieved through trial and error. “I don’t think it’s something I established or woke up one day and said I need to do this, this, and this. I just over the years have been swimming for 14 years now, whenever, however long I’ve been swimming and it’s just something that’s kind of happened”

(Ricky). “Yeah, I mean, warm-up was probably learned, you know, depending on how you feel over time. You know, just kind of compiling all that data over the years. And saying, you know if I feel like this I figure I should do a little bit more or do a little bit less” (Aaron). Other elite swimmers in this study parroted this sentiment. They listened to their coaches, whether at an early age when learning how to act at a swim meet (Peter) or in college when trying to establish a warm-up for a meet (Ryan). They watched other swimmers in order to try out what they did to prepare at a meet. Also, they learned to trust themselves. “I had a preset warm-up through high school, with my club team ... It’s probably around my junior or senior year and I just realized that hey, why am I still swimming, I’m already warmed up, I feel good? ... It’s probably around 17 or 18 years old… that’s when I started trusting in that ability [and] thinking that maybe it doesn’t have to be a set warm-up” (Aaron). In the end, “I would say [my routine was] built on trial and error. The procedure that I do, which [was] pretty much set, I’ve been doing for pretty much my whole career, at least my international career and what I consider the success of my career” (Peter).

Although their routine was “set” by this stage of their careers, these Olympic gold medalists continued to learn and make adjustments. For example, every participant but one stated that they do not hold much stock in how they felt during warm-up. Each recounted examples of when they felt horrible in warm-up and swam well and times when they felt great in warm-up and did not swim well during the race. The one elite swimmer who did not make a statement like this during interviews was Ryan. Then, when asked at the end of his follow-up interview, if there was anything new he had recently learned, Ryan said,

> … actually what I kind of noticed, I kind of just picked this up at Pan Pacs, is the way that you feel in the water has nothing to do with the way you’re going to race. I was

> doing everything to the "T" what I usually do and I was doing pace and I was god awful. I was just horrible and I was pissed and I was like almost yelling [at my coach], like , 'what is going on like I feel so bad right now.' He said, 'Don't worry it's just the feel, it's not going to affect you.' And then I was like, 'No, but I feel bad' and then at the race my race I was good. And I was like alright, I believe you now. (Laughter).

This was a lesson that all the other elite swimmers had learned and yet, an individual Olympic gold medalist and multiple world record holder just learned this seemingly basic truth at his latest meet. The acquisition of the tasks in a competition-day routine are learned through trial and error, continually.

Task acquisition, as described, supported Gould and colleagues' (2002b) ascertainment that psychological skills were learned through both direct and indirect instruction. Some of the tasks in the routine were based on psychological skill, i.e., relaxing. However, beyond this, the other skills such as stretching or warming-up, were based on direct instruction from coaches, indirect instruction through watching others, or thinking up a new way of doing something on their own. The tasks that were part of a competition-day routine were acquired through the influences of others, which furthers the literature in understanding what kinds of skills were taught by coaches, teammates and competitors.

Interactions of Attributes

Each of the attributes of a competition-day routine -- flexibility, adaptation, automaticity, time management and skill acquisition -- were major themes during data analysis. These distinct characteristics, taken individually, helped describe the five most crucial aspects of the competition-day routine. For instance, flexibility was denoted as a defining characteristic in order for participants to consider the competition-day routine as a routine due to their

understanding of a routine as strictly prescribed and leading to negative consequences if not followed exactly. This attribute in seclusion aided in defining the actions taken on a day of an elite competition as a routine, however, knowledge of this aspect alone, as with all the attributes taken individually, does not represent the routine as a whole, but only the sum of its parts. The manner in which these characteristics interact and aid these gold medalist swimmers in remaining comfortable and focused was also due in part to the interactions of all the attributes. Throughout the interviews and observations, examples of these attributes working seamlessly together were prominent. Some of these examples, explicated throughout this section of the chapter, demonstrated these interactions that helped these Olympic gold medalists prepare for their races.

In most of the decisions made for race preparation, automaticity and time management were the first considerations. Each swimmer began preparations based upon the scheduled time of their race and how much time each task in their routine would take to complete. The timetables followed by these athletes were set in their minds to the minute. As illustrated above, all the athletes knew what they needed to do and completed those tasks without extensive cognitive processing (automaticity of action). Additionally, these athletes knew the amount of time they needed to take for each task and, consequently, when to start each element of their routines (time management). During observations, the precision of the statements regarding time management, routine tasks, and task sequence were shown accurate, unless there was the need for adaptation.

Adaptation to the environment happened throughout both the Olympic Games and the 2010 Nationals. During the Olympics, Ryan adapted to his sickness, Garrett to different conversations with teammates, and all of the athletes with being surrounded and competing in

the most elite competition of the quadrennium. Ricky, as well as the others, had to deal with the suit check change during Nationals. Each of the successful changes to schedules were a result of a combination of the attributes working together so that the routine could be followed fluidly and accurately based upon the circumstance or context. Using an example of Ricky arriving early to the pool on the final day at 2010 Nationals Qualification meet, the interactions of the attributes of a competition-day routine can be described.

As stated above, Ricky arrived at the last day of Nationals much earlier than normal. As Ricky stated in his follow-up interview:

> "[For] the 400 free at this year's nationals, in the prelims I got to the pool, we didn't do a wake up swim before it but we got to the pool about 3 to 3 1/2 hours before my race for some reason. I don't know why we did that… yeah, I still don't know why they did that but… I probably did a wake-up swim, a "wake-up swim" because we were there so early, did about 800 and then got in the pool about an hour to an hour and a half later, which was too soon, so I probably warmed up a ton. You know mentally I really didn't think about it until after the race. It's just kind of stuff like that, you know you get a flat tire on the way over to the pool, you still have plenty of time to figure everything out."

In this example of routine, Ricky was faced with a timing issue. After arriving at the venue, he noticed that he was very early. Ricky used time management skills to devise a contingency plan. He knew he had arrived quite early to the venue and, based on this arrival time, normal routine, and time of his race, decided the actions to take and when to employ those to complete preparatory tasks. In most cases, or at least at this elite meet, Ricky had started his days with a wake-up swim. Since that was his normal routine, and it had been skipped, Ricky reasoned that

it was fine to swim once he had arrived at the venue. Therefore, he got in the water and swam 800 meters to warm-up.

Along with this decision about what to do based upon time, Ricky used his knowledge of his competition-day routine and decided at what point in his routine to start his normal pattern of actions. Ricky could have sat around the pool deck and waited for his usual time of warming-up before realigning his actions with his routine. Regardless of the decision, Ricky did not have to think what he should do now that the timing of his routine was drastically different. His reaction was to revert to his automatic actions and spend his time attending to more adaptations that needed to be made. One might have been how far to swim now that he was closer in time to his race than a wake-up swim. He swam 800 meters, which is farther than his normal, " Just like a couple hundred [meters]." Also, Ricky swims his warm-ups by feel. As he stated in the follow-up interview:

> "It's been so long since I've have somebody tell me how to warm up that I'm not sure. Yet I'm sure it's important. I don't really like Eddie's warm-ups. Just because ... like I said before it's swimming until you feel good and if he wants you to do something different… he doesn't know how you feel, he doesn't know how you feel in the water, and when you're ready for pace and stuff. I guess I would rather do my own stuff just because I'm the one that knows how I feel and stuff."

It could be assumed that the 800 meters were based off of how he felt. This meant that his automaticity in warming-up, which used low cognitive energy, allowed him to attune to the needs of his body (adaptation to self) and make decisions based upon the atypical situation of early arrival (adaptation to the environment).

These fluid, fast and accurate adaptations to Ricky's schedule were only achievable because Ricky viewed his competition-day routine as flexible.

> "I do have a flexible routine ... I'm not one to get screwed up if ... or mentally fall apart if my routine is messed up ... There's a lot that goes on race day and if you are a person that sticks to a strict schedule race after race day and something does get screwed up, I mean,… the more you stress about it the more you screw up or something's going to happen."

If Ricky considered his routine strict and not amendable, these changes would be difficult to make and not allow him to remain relaxed and focused for his race. Flexibility, as an attribute of a competition-day routine, allows for time management, automaticity and adaptation to happen so that he was prepared to compete at this elite meet.

Lastly, Ricky reflected on this last day of competition. This led him to conclude, "so I probably warmed up a ton. You know mentally I really didn't think about it until after the race." This was knowledge acquisition through trial and error. In the process of reflection, a key component in expert learning, Ricky analyzed decisions made during the meet in order to inform future contingency plans. Maybe next time Ricky did not get in the water until his normal warm-up time, or different decisions were made. Regardless of what decisions were made, through reflection and trial and error, Ricky acquired new ways of analyzing his situation so as to make better decisions in the future.

The example above demonstrated one way in which the attributes of a competition-day routine interacted in making an adaptation. Throughout data analysis, various types of changes were made to a competition-day routine. Some were rather small, such as signing an autograph, and others, like the example of Ricky arriving quite early in the day for his swim, were more

important. There did not seem to be a specific prescription or description of how the attributes interacted. For Garrett, who received the wrong type of caps for the Pan Pacific Games, he was presented with a change to his equipment (adaptation to environment), which in turn affected his time management because he needed a few minutes to relax. In other situations, such as Aaron being overly nervous before the 100 backstroke in Beijing, adaptation to self was first recognized as being attended to and this affected the rest of the attributes. Although each interaction could be examined in order to understand the nuances of the interaction, for the purposes of this study, evidence demonstrated the importance of the attributes affecting one another so that these elite athletes could make changes to their routine in such a way that they remained calm and focused while learning through trial and error.

Summary

The purpose of this chapter was to report the descriptions and attributes of a competition-day routine for elite swimmers that resulted from analyzing the collected data. To this end, this chapter described both the tasks and attributes of a competition-day routine. A competition-day routine consisted of waking up, eating breakfast, departing for the venue, arriving at the venue, warming-up, relaxing, going to the ready room, swimming the race and warming-down. This routine was repeated for each session. Whereas all the participants completed these tasks, at least three of five also stretched and warmed-up a second time before leaving for the ready room.

The attributes of a competition-day routine were flexibility, adaptation, automaticity, time management, and task acquisition. Flexibility was a definitive characteristic that was more performative in nature and provided an accommodating pattern of tasks that were amendable. Adaptation was an attribute that referred to the athletes adjusting to the environment of the competition and how the participants felt physically. Automaticity was the fluid, accurate

performance of actions in order to complete tasks. These performances did not consume a large amount of cognitive energy and allowed the swimmers to attend to themselves and events happening around them. Time management was the basis for the routine, in that, the decision when to start a task was based upon the time needed to complete the task and the proximity of the swimmer to his race in time. Finally, tasks acquisition occurred through trial and error through the modeling of coaches, teammates or competitors. All of these attributes interacting in a cohesive whole was a key to the athletes completing their competition-day routines.

CHAPTER 5

PURPOSES, BY-PRODUCT AND DEFINITION OF A COMPETITION-DAY ROUTINE

The purpose of this study was to investigate the actions taken by Olympic gold medalist male swimmers during an elite competition. Using grounded theory, the current study provided a substantive theory regarding the competition-day routine and its meaning to these elite athletes. The purpose of this chapter was to report the purposes and by-product of a competition-day routine, define a competition-day routine based on the data analysis, and proffer implications for coaches and athletes based upon the findings of this study. Therefore, each of these aspects of a competition-day routine were presented and discussed in the following order: (a) the purposes -- comfort and focus, b) the by-products --enjoyment, excitement and fun, (c) the definition, and (d) study implications.

Purposes of a Competition-Day Routine

Comfort

One purpose of a competition-day routine was comfort. Throughout the interviews, when asked what the purpose of their routine was, the participants in this study all stated that comfort, calm, relaxation or combination of those terms was the major objective for their pattern of behaviors. For instance, when asked about why he dries off after warming-up, Peter stated, “I think I just want to stay warm. ... so I dry off to stay warm and relaxed for the race. I might keep my suit on but I dry off most of everything. I think it’s just comfortable.” As shown in this quote, the terms relax and comfort were closely related. These terms, along with calm, were initially used as separate themes or categories during data analysis. However, the question

remained as to which sub-categories or underlying characteristics differentiated these themes. It was concluded that instead of each term delineating divergent purposes with distinct characteristics, these themes were in fact one purpose with the participants using the terms and concepts of comfort, relaxation and calm interchangeably. Further, for clarification during the follow-up interviews, the elite swimmers could not with consistency separate what they meant by these terms. For example, when asked for the purpose of a routine, Ricky stated, "I think your routine is supposed to make you comfortable ... I think people have routines to help them be comfortable, help them know they've done this before, and they know where they are." A clarification question then asked if relaxation and comfort were the same, to which Ricky answered, "Yes." Then, two questions later, following a description of comfort as "Stay[ing] warm, put on some shoes, shorts, and just sit down," Ricky could not differentiate comfort and relaxation.

> "[Comfort is more] physical just because your body has done it over and over again and it knows how it should feel. Doing that will just help it feel like it knows what it's getting ready to do. Also, just relaxing.… mentally just because it put your mind at ease just because you know what you're about ready to do. you're not stressing out about anything. That's probably the main thing. You're not freaking out that something is going wrong right now just because you've done it over and over again and you know what you're doing ... I think comfortable is more the mindset and relaxed is more physical. Just because my body, when I'm relaxed, I'm just sitting there and my whole body is just at ease. Comfortable is my mindset."

Therefore, the use of any of these terms were seen as synonymous, leading to a much richer understanding of what comfort meant to these athletes.

After the decision to combine comfort, relaxation and calm into one purpose of a competition-day routine, the data analysis resulted in four types of comfort: knowledge-based, mental, physical and combined comforts. The remainder of this section will present each of these types of comfort and end with a summary and discussion.

Knowledge-based comfort. As stated above, a purpose of a competition routine was comfort. As Garrett said during data collection, " I think some of the reasons for having a routine are that when you have the kind of tasks that you do, I think it makes it so you feel more comfortable that you're doing the right thing." In this type of comfort, he remained calm and did not spend his time or mental energies worrying about whether the actions he took were actually preparing him to swim his fastest. Ricky furthered this sentiment when he said, "I think people have routines to help them be comfortable, help them know they've done this before, and they know where they are" (Ricky). More than being able to know what he was doing to help him perform, this type of comfort allowed Ricky to keep track of his preparation and keep him in the moment, whether that be in the warm-up, in his down time, or in the ready room. He stayed focused.

In addition to knowing what to do on race day and staying within the moment, Peter described another aspect of the knowledge-based comfort when he stated, "Keeping myself comfortable, assuring myself that I am physically ready to go, and so, if I didn't eat breakfast and I did warm up I'm smart enough to know that that's going to affect my performance because there are physical issues there." Peter described his knowledge of essential tasks within his routine in light of what parts of his routine could be truncated or eliminated if there is not enough

time. The competition routine allowed the athletes in this study to relax because they knew what they were doing, how to change their tasks to fit their situation, and what was going to make them prepared for their race. It allowed them to complete the same tasks and know, "I really don't [need to] change anything about my... my warm-up or anything like that. I just get relaxed. I [can] just go out there and swim" (Ryan). This knowledge-based comfort was the first type of comfort that the swimmers in this study described.

Mental Comfort. The second type of comfort was mental comfort. Specifically, mental comfort was when the elite swimmers were free from worry or nervousness about their race. It was to "just completely keep your mind off of [the race], which is essential" (Aaron). There were several ways in which the athletes in this study kept their thoughts away from swimming during their competition-day: (a) listening to music, (b) hanging out with friends, (b) taking a nap, (c) daydreaming and, most importantly, "... you know, try to keep your mind on something else and just talk" (Aaron). More specifically, Aaron jokingly adds that he "likes to talk to anybody about something. You know, it usually helps to sit down with a cute girl and discuss it there and talk ... I usually get to the blocks feeling a little bit more comfortable." In a similar statement, Ryan insists that he will talk about "Anything. Food. Some girl I hooked up with. Anything. Anything that comes up. Anything but swimming. I like joking around with people, people talking, walking around, like taking my time, seeing the pool." This joking around included his friends, teammates, coaches and competitors. During a coach interview in which three of the participants were included, the primary observer recorded the multiple ways in which Aaron, Garrett and Ricky could easily interact with their coach. This was the same type of talk or interplay that was noticed on deck during the observation. But, more than Aaron, Ryan

took this distancing himself from thinking about his swims to an extreme, as was demonstrated in a story from Ryan's high school state meet his senior year.

As Ryan recounted, his soon-to-be-coach for his collegiate career came to watch Ryan swim at the Florida high school state meet. Just before the 500 freestyle, the consolation "C" final race in the water, this collegiate coach turned to Ryan's father and asked where Ryan was since he was missing from the other "A" final competitors gathering behind the blocks. A teammate was sent to find Ryan, who was "shooting hoops" in the gymnasium next to the natatorium. Ryan grabbed his belongings, ran to the blocks, arrived just before the whistle called his heat on the blocks, and proceeded to win the race by 25 yards. "And that's like how I've done all the time. But I don't care about swimming. I mean like I care about swimming but I don't" (Ryan). As he went on to explain, Ryan cared about how he races and the sport, but he was not consumed by the sport. "I do so many different things. I have ... skateboard and I play volleyball and basketball. I do that for different training to relax," which led others on his team to say he was a bit wild or, "they always say, 'Like there's Ryan' or if I do something crazy there like, 'Yup, that's Ryan'" (Ryan). Most of the swimmers felt the same way about lessening the amount of mental energy spent on thinking about their race, but maybe not to the same extent as Aaron and Ryan, who wanted to keep their swimming at arm's length as much as possible. For the other swimmers, it was not a problem if they thought about their races from time to time, but they did not invite the contemplation of their swims.

This focus on reducing or eliminating thoughts and conversations of swimming could be a significant difference between these athletes. The data suggested that the more successful athletes kept their thoughts away from swimming the most. If the participants in this study were

divided into levels based on past success, from highest to lowest success, the levels would be as follows: (a) Aaron and Ryan, (b) Peter, (c) Garrett, and (d) Ricky [see Table 5.1].

Table 5.1

Descriptions of Participants' Elite Accomplishments

Name	Accomplishments
Aaron	Olympics: 2008 -- Gold (100m Backstroke, WR), Gold (400m Medley Relay), Silver (200m Backstroke). 2004 -- Gold (100m Backstroke), Gold (200m Backstroke), Gold (400m Medley Relay). 2000 -- Silver (200m Backstroke). Long Course World Championships: 2009: Gold (200 Backstroke, World Record), Gold (400 Medley Relay, World Record). 2007: Gold (100m Backstroke, WR), Silver (200m Backstroke) 2005: Gold (100m Backstroke), Gold (200m Backstroke), Gold (400m Medley Relay). 2003: Gold (100m Backstroke), Gold (200m Backstroke), Gold (400m Medley Relay). 2001: Gold (200m Backstroke). World Records: 5-time LC World Record Holder* (100 Backstroke, 200 Backstroke, 400 Medley Relay)
Ryan	Olympics: 2008: Gold (200m Backstroke), Gold (800m Freestyle Relay), Bronze (200m Individual Medley), Bronze (400m Individual Medley) 2004: Gold (800m Freestyle Relay, American Record); Silver (200m Individual Medley) Long Course World Championships: 2009: Gold (400 Individual Medley), Gold (200 Individual Medley, World Record), Gold (800 Freestyle Relay, World Record), Gold (400 Freestyle Relay, Course Record), Bronze (200 Backstroke) 2007: Gold (200m Backstroke, World Record), Gold (800m Freestyle Relay, World Record), Silver (200m Individual Medley), Silver (400m Individual Medley), Silver (100m Backstroke). 2005: Gold (800m Freestyle Relay, American Record), Bronze

(200m Backstroke), Bronze (200m Individual Medley), 5th (400m Individual Medley).
World Records:
3-time LC World Record Holder (100 Backstroke, 200 Backstroke, 800 Freestyle Relay)

Peter
Olympics:
2008: Gold (800 Freestyle Relay, World Record), Bronze (200 Freestyle).
2004: Gold (800 Freestyle Relay, American Record)
Long Course World Championships:
2009: Gold (800 Freestyle Relay, Preliminary Swimmer), 4th (400 Freestyle), 6th (800 Freestyle).
2007: Gold (800 Freestyle Relay, World Record), 4th (400 Freestyle), 9th (800 m Freestyle).
2005: Gold (800 Freestyle Relay, World Record), 6th (200 Freestyle), 6th (400 m Freestyle).
World Records:
LC World Record Holder (800 Freestyle Relay)

Garrett
Olympics:
2008: Gold (400 Freestyle Relay, WR), Gold (400m Medley Relay, Preliminary Swimmer), Semi-Finalist (50 Freestyle), Semi-Finalist (100 Freestyle)
Long Course World Championships:
2009: Gold (400 Freestyle Relay, Preliminary Swimmer)
2007: Gold (400 Freestyle Relay, Preliminary Swimmer), Gold (400m Medley Relay, Preliminary Swimmer).
World Records:
LC World Record Holder (400 Freestyle Relay).

Ricky
Olympics:
2008: Gold (800 Freestyle Relay, WR).
Long Course World Championships:
2009: Gold (800 Freestyle Relay, World Record), Gold (400 Freestyle Relay, Preliminary Swimmer).
World Records:
LC World Record Holder (800 Freestyle Relay).

Sources: www.usaswimming.org, fina.org, gwgswims.com, ryanlochte.com, aaronperisol.com. *Notes:* World records does not denote the number of time each of the world-records were broken, only when they broke a world record that they did not hold at the time.

During data collection, Ryan and Aaron, the most successful swimmers, stated that they did not want to talk about or think about swimming during their routine, if possible, until they were alone in the ready room. Ryan, actually, tried not to think about his race until he was almost on the blocks. This was the attitude of the highest performers within the sample of Olympic gold medal male swimmers.

In the next level of Olympic gold medalist, Peter would talk about his swims, if that topic of conversation arose, but he did not dwell on his races. “I know a lot of athletes over think the races and really psyched themselves out and so I try and you know I’ll talk to people. We will talk about swimming, but we’ll talk about other stuff that is going on” (Peter). Garrett, who has experienced just a little less success than Peter during his swimming career, in a similar mindset, thought about his race from time to time, but did not like to talk about his race during a competition-day. Garrett would, “think about boats ... think about food ... think about the race, you know ... think of a joke someone told me ... it doesn’t really matter as long as it’s positive.” For the most part, the four most successful participants either did not think or talk about their race or keep these possible distractions to a minimum.

Ricky, who was the in the lowest category of swimmer based upon success, on the other hand, did not exclude or decrease conversations or thoughts about his race on the day of competition. For example, during Olympic Trials, Ricky asked his brother to stay in the hotel room during downtime in order to keep him calmed down. The evening session would be the final of the 200 freestyle, Ricky’s best chance of making the USA Olympic team. He was so nervous, because he could not stop thinking about the finals race to come, that he made an appointment with the USA national team sport psychologist to help him relax. Ricky’s need to reduce this aspect of his routine did not go unnoticed by his coaches. “Actually, [my coach]

always told me that I need to stop. I get too serious around the meets and just set off by myself and I probably need to stay more relaxed and hangout a little bit more" (Ricky). Further, at the end of the second or follow-up interview for this study, after stating that he was always exhausted mentally at the end of each day of competition, Ricky asked me what the other swimmers, specifically Ryan and Aaron, did to keep from getting mentally spent when they swim so many events. I responded that, from the data collected and not yet analyzed, that those swimmers socialized and did not think about their races until they were at least in the ready room. Realizing how he was different from those swimmers, that is, he thought about and visualized his race continually until he gets to the ready room and then relaxed his mind, Ricky said, confirming this analysis, "Usually I feel like the ready room for me is that time when I kind of socialize, that's kind of my mental break actually. So I guess I'm kind of the complete opposite of everyone else." This finding demonstrated the importance of mental comfort or relaxation; however, it would be an overstatement to suggest that this was the differentiating factor between those who succeed at the highest individual level at the Olympics and those who do not. This finding did suggest that mental comfort might be a significant factor on the day of competition and a topic for future research.

Physical comfort. Physical comfort, the third type of comfort, was a constant concern for all the elite swimmers in this study. The participants were concerned with their physical comfort level both in and out of the water. For instance, all of the athletes either stretched or got a massage, or a "shake," when they arrived at the pool. Peter preferred being stretched by the masseuse; Ricky got a massage, while Aaron, Garrett and Ryan stretched on their own. During this time, the participants described this as a time to relax, warm their bodies up, and adapt to their physical condition. "I relax, stretch little bit, talk a little bit… you just kind of get to feel

how your body is ... How much warm-up you're going to need to do, kind of getting a feel for what's tight and what you are going to have to work on, …" (Aaron). It was a time of easing into the meet before going to warm-up. "I just keep stretching until I feel really loose and relaxed. So, I do that for like 20 minutes and I get in. I do my normal meet warm-up" (Ryan). This was one part of downtime, a space in the routine in which the participants focused essentially on relaxation.

Following this stretching time, these elite swimmers went to warm-up. Garrett's warm-up was the most interesting because of the remarkable tactics he employed. Warm-ups in general, but especially at the international or elite levels, are chaotic and somewhat dangerous, leading to minor injuries like bruises. In order to remain calm within this climate, Garrett would swim slowly and not stop because, as he said in his initial interview, "it feels better to me but also I swim slowly because I think it makes it easier on me because people just go around me. I like never stop ... So now, I never get beat up. I just can relax." Like Garrett, the other participants used this time to make sure their body was ready to race. They relaxed and felt the water for the beginning of this swim. All the swimmers took a long swim, between 500 and 1000 meters to just get moving and allowed the body to adapt to the activity. The rest of the warm-up involved different exercises, i.e., drills, kicking, and sculling, in order to mobilize separate parts of the body such as the upper or lower body. Most of the participants swam until their body "loosen[ed] up" (Aaron) or they were warmed-up enough that "the muscles [we]re ready to fire like they're meant to be fired in a race" (Peter). From the pool and their warm-up, where physical relaxation was achieved, the elite swimmers tried to maintain the warmth and comfort they felt upon exiting the water for the remainder of the meet.

All the participants changed out of their swim suits and into dry clothes, which included shorts, shirts, sweatshirt or parka, and shoes. The reason for this change was to keep the muscles warm until the swimmers changed into their racing suits "because you need those muscles to stay relaxed. A cold muscle will tense up and won't be as effective as a relaxed muscle" (Peter). "You don't want to be cold. You don't want to be too hot. You want to be comfortable in any facet of life, you know, we would rather be comfortable than uncomfortable" (Garrett). If the muscles stayed warm and loose, then they would be able to perform better in the race. "I know that when the muscles are warm and loose, just from my own personal experience, they perform better ... it's important to hold onto that and try to maintain that because it can, a good warm-up can be lost pretty well because you get cold" (Aaron).

During this downtime, the participants stayed relaxed physically by staying warm and sitting. As detailed in the section *adaptation to self* in the previous chapter, the athletes stated that they tended to sit in the stands or in their team area during the meet when they were not preparing for their swim, their legs felt tired, or they had a number of races in the session. The primary researcher also observed this behavior by all the participants. These observations recorded instances when the athletes stayed seated when the rest of the stands stood up to watch the end of a close race in the competition pool. The athletes in this study did not stand to see the end of the race. To them, it was more important to stay off their legs. Additionally, the swimmers got massages following their warm-up and lay down with their legs on the wall to "increase my blood flow. It helps the recovery of them I guess. I know [my coach] always tells us to do it so I do it. (Chuckle)" (Ricky).

The importance of keeping their bodies comfortable was expressed by all the participants in this study. Having the muscles warm and the body relaxed allows these elite swimmers to be

ready for their races, to perform at their best. Although it might be easy to see these divisions, e.g., mental comfort and physical comfort, as separate in and of themselves, most of the time that these athletes were preparing their bodies by relaxing and staying comfortable they were also keeping their minds quiet, saving that mental energy for the race. Anytime there was downtime, no specific tasks to complete in their routine, such as the time between breakfast and leaving for the meet or between warm-up and getting ready for their race, the men in this study stayed comfortable both physically and mentally. There were three specific times that the swimmers described as the places they experienced as both physically and mentally relaxed: breakfast, downtime, and in the water.

Combined comfort. Three distinct segments of a competition routine were specifically described combining physical and mental comfort: (a) breakfast, (b) downtime and (c) in the water. Breakfast was a time when the elite athletes socialized while taking care of their bodies by feeding. All the athletes said that eating was essential to success in their races. However, beyond this, breakfast was a time of talking and keeping their minds off their swimming. Additionally, downtime allowed participants to socialize, providing mental comfort, and relax physically in their rooms before going to the venue or while they sat on the pool deck. Breakfast and downtime were important parts of these elite swimmers' routines, however, the most significant place where the gold medalists were at peace both mentally and physically was in the water.

Most of the swimmers expressly spoke about their time in the water as a place of solitude and relaxation. Specifically, this place of solace was in reference to the second warm-up swim. Most of the swimmers take second warm-ups -- everyone but Ryan. For Aaron, Ricky, Garrett and Peter, jumping back in the water with their race suit on was the most comfortable they felt

during a competition-day. "So getting in the water and getting into the zone is like being back at practice where, I've prepared for this and I get back to a place of comfort where I feel good and I'm ready to go" (Peter). "Actually, yeah, too. I think it also helps to get in the water. It can kind of calm you down a little bit too. It's nice to just be underwater, the solitude of it, it's nice" (Aaron). More specifically, Rick told a story about when he was at NCAA in 2010. A teammate of his was nervous before swimming the finals of the 50 freestyle. The teammate said that he was feeling ill and would puke due to his nerves. Ricky told him, "'you don't need to puke; you need to get in the water.' He got in the water, swam a 50, and calm down. He did that and he went on to win the event" (Ricky). The swimmer got back in the water and relaxed. Moreover, for Peter, this is where he could "flip a switch," or "get into race pace and simulating how that race is going to feel ... just enough to take my body to the point that it's ready to go that speed," to race. Being in the water, especially right before heading to the ready room was a special place for these swimmers. A place to relax the most before entering the ready room was the final stop before racing.

The first purpose of a competition-day routine was comfort. Whether described as relaxation, comfort, or calm, all the Olympic gold medalist male swimmers sought to perform those actions that led to knowledge-based, mental, and physical or combination comfort on the day of an elite race. This aspect of preparation for competition confirmed the analysis of psychological skills and factors that affected performance at the Olympics (Gould et al., 1992a; Taylor et al., 2008). Olympic athletes were found in these studies to require relaxation in order to perform at their best. This was found true in the present study while further emphasizing the specific types of relaxation sought by these elite athletes.

Focus

The second major purpose of an elite swimmer's competition-day routine was focus. Almost all of the participants focused on reducing distractions, preparing for a finals race or knowing what to do to be ready for their race. First, most of the participants spoke specifically about one benefit of their routine as providing the ability to weed out those thoughts or actions that were not necessary during the competition. For example, as stated above, see Mental Comfort, this meant not concentrating on their swimming until absolutely necessary. The best description of how his routine helped focus was from Peter:

> I think it's all about focus for me. I don't think there's one thing in particular that I focus on exclusively. I just try to keep the distractions out. Stuff that I would normally put some energy into mentally I just zone out ... I just block it out. It's just not a factor. For instance, on a normal day if I get a bunch of e-mails I'm usually pretty good about responding to them pretty quickly and taking care of stuff like that. But on race day, my inbox just fills up and I don't worry about it ... I think some of those things might be, you know, talking to people or people on deck that are not swimming that day, you know, if I'm not swimming that day I might take the time out to have a conversation, but if I'm swimming then I usually just keep to myself. I say a little more focused.

When focused, as described above, Peter entered his "comfort zone" where he "[kept] that confidence and positive energy and control[ed] the excitement and focus[ed] out distractions." This ability of Peter to "eliminate those possibilities [or distractions], and if he ever couldn't, I don't know, I've never seen it" (Peter's Coach). One way that he, and some of the participants, achieved this focus was listening to music. Music for these athletes was a way to calm down or get moving, depending on the speed and rhythm of the song. Peter said that some of the music

matched the rhythm of his races, while Ricky, when he did listen to music, used slower, calming, such as Dave Matthews Band to relax. Ryan listened to music only when he arrived at the pool stating, “I listen to music from the village until I’m done stretching. From there until I’m done stretching I listen to music and then after that I don’t listen to music anymore.” In these situations, the music was calming or upbeat, but also focused the athletes on a rhythm, feeling or task. While the use of music was used by most of the elite swimmers in this study, Garrett and Aaron normally did not listen to music as a way to focus on the atmosphere and keep their mindset in the meet.

> No, I mean, people listen to their music, that can be fine because you’re doing what you’re used to. But, ... [when] your headphones are on you’re not talking to people, you’re not paying attention to what’s going on, you’re not noticing people’s good swims, so it takes you out of the whole personality of the meet because you were so distant, you know? ... [My coach] doesn’t like us listening to music. And also he doesn’t like you doing things that you might rely on that could potentially go wrong. What happens if your iPod battery dies? You know, you don’t feel comfortable with the music, that’s not good. What happens if they don’t have the coffee you like? What happens if you go to the village and they don’t have the right kind of food? You know (Garrett).

The same reason that the other three swimmers listened to music was the same purpose that Aaron and Garrett did not; they wanted to stay focused on what made them ready to swim. This meant socializing with others and keeping track of what was happening in the meet. This included getting energy from fast swims. Additionally, the possibility that their music was not available, i.e., run out of battery power, would invite more distraction. In other words, not doing something that could potentially become a distraction to them was as important as keeping away

from thinking about the impending race. Most of the other elite swimmers talked about the same type of focus, the ability to keep out distractions, but, some of these participants also mentioned other foci during their race day.

Aaron spoke about being focused for finals. In this sense, as he swam preliminaries and semi-finals, his routine helped him to make adjustments for further success toward making finals and, in the end, winning the event. "My main focus is always on the final race, the finals races. And preparing for those things in particular, you know, using the whole day to kind of warm-up for that finals race ..." (Aaron). The entire day, all the tasks in his routine allowed him to prepare for finals. In this sense, the focus was on a race and his routine allowed him to concentrate on the overall goal of winning.

Garrett proffered another kind of focus on race day.

> You know, everyone has their own thing but having a routine keeps you from… almost being stagnant, you know? ... Like, sometimes we don't have anything to do you just kind of sit there and wonder what should I be doing. You get nervous thinking you should be doing something and you're not. So if you have a routine, things that you're going to do for sure then you have tasks that you have to do and just continuing to do those tasks will help you, I guess, stay focused and stay calm (Garrett).

In this way, the tasks of the routine allowed Garrett to have confidence in their pattern of behaviors and kept his focus on the race and filtered out distractions. In all these cases, a purpose of the routines of these athletes was to help them focus on what is important, whether that is not being distracted, concentrating on their finals races, or permitting them to remain calm knowing that what they do will lead to success. Or, as Ryan said, "so I go in there and I know,

you know, what I'm doing and I don't have to worry about anything else. I can just have fun" (Ryan).

The ability for Olympic athletes to focus was found to be a purpose of a competition-day routine. Focus was a major component in the analysis of psychological skills and factors in successful Olympic athletes. Orlick and Partington (1988) described the pre-competition plan as aiding in helping athletes to focus on what was needed for success in their event. According to Gould and colleagues (1992b, 1993), focus was a hallmark of the most successful Olympic wrestlers while lack of focus was a detriment to those wrestlers who did not perform well. Additionally, the medal winning Olympic wrestlers were able to return to their needed focus when distracted. This characteristic of focus was confirmed by Gould et al. (1999). The emphasis of focus as a needed part of a competition-day routine was again related to successful performance. The present study identified specific ways in which focus was kept during the day of competition. This furthered current understanding of focus by broadening the scope of how focus was described and the manner in which focus was kept by Olympic athletes.

Section Summary

Comfort and focus were found to be the two purposes for adhering to a competition-day routine. Comfort was both a state of being in which participants felt as though they were ready to perform. Types of comfort included knowledge-based, mental, physical or a combination of mental and physical. Interestingly, the most comfortable for the swimmers was in the water. Focus allowed the athletes to block out distractions or thoughts that would not help them perform well. In addition to achieving these two goals, the participants in this study found specific by-products of following a competition-day routine. In the next section, excitement, enjoyment and fun will be described and discussed.

By-Products of a Competition-Day Routine

The purpose of a competition routine was to assist the swimmers in being comfortable and focused. The product of these routines was the highest level of performance during the swim meet. Besides the result of competition success, the actions taken by these elite swimmers also created by-products, or secondary outcomes, which were designated as critical for these athletes. More specifically, enjoyment, or the excitement and fun of the meet, was fostered as a result of the athletes being comfortable and focused on the tasks at hand. These by-products of a competition-day routine were not directly caused by the participants' pattern of behaviors; however, they were indispensable secondary outcomes that assisted these swimmers in succeeding and added length to the swimmers' careers.

Enjoyment

The reason that these elite swimmers were competing after their college careers had finished was that they had support to pursue their dreams and, more importantly, they enjoyed swimming. As Aaron described in his follow-up interview, he loved swimming and planned to continue to participate in the sport even after his professional swimming career ended. Similarly, Ryan stated that he would be finished with his swimming career and retire "once I stop having fun in the sport of swimming, I'm done." Both these decisions were based upon the enjoyment of the sport.

Additionally, the athletes enjoyed swimming when they performed at their best. Ricky talked directly about this when he compared his last two summer seasons. This year was an arduous season in which he did not achieve many of his goals. It was difficult for him to be motivated, have fun, or take pleasure in what he was doing in the sport. In contrast,

> Last summer was a very good summer. Nationals last summer, it went fine. I qualified for two relays last summer but at Rome [World Championships] I was extremely excited. I was really, really enjoying the trip. I was enjoying swimming. And I remember before the 400 freestyle relay in prelims, although I busted my suit up, I remember being with the guys in the relays, the coaches were talking to us and I was jumping up and down. I was really, really excited about swimming the 400 free relay. I made the relay get in and give a cheer and stuff because I was so pumped up about this relay.

Ricky's performances seemed somewhat directly affected by his enjoyment, and his enjoyment by performance, as was the motivation to continue swimming for Aaron and Ryan. All the swimmers in this study spoke to the fact that enjoyment, or excitement and fun, were part of their competition-day experience on days when they were successful. So important was this aspect of enjoyment that time was scheduled into their routine for those actions that were enjoyable, i.e., hanging out with friends. Again, enjoyment was not a purpose of their routine; however, it allowed them to find more enjoyment in their race day experience.

Within their enjoyment of a competition day, the elite swimmers in this study spoke of the excitement to race and the fun of being at elite meets as two separate interconnected parts of their experiences. These are not synonymous, but two by-products of their routine that keeps them in the sport and allows the swimmers to perform their best at the highest level meets.

Excitement

There were several interpretations of excitement described by the participants in this study. The first definition is excitement in general. The Olympic Games was an experience of a lifetime. The athletes had the opportunity to compete for the highest honor in their sport, to realize a dream, and there were common sentiments on this general, overarching experience.

More specifically, the participants' excitement was a feeling of anticipation and positive expectations, that "you are about to swim as fast as shit" (Ricky). It was the "energy of the race day" (Peter). It was something that built up; climaxed around the time the swimmers reached the ready room, just in time for them to swim their Olympic finals races. Excitement to swim fast and accomplish a goal, whether at the Olympics or at another elite meet, was referred to as important to their race day.

The term "excitement" was described by the participants as a specific preparatory feeling experienced right before the race. Two terms, excitement and nervousness, were used to express excitement in a both a paradoxical and symbiotic relationship. During the initial coding during analysis, these terms seemed almost synonymous with the only distinction being that "excitement" was positive and "nervous" being negative. Indeed, several of the swimmers described whether they were ready to race using these idioms on a continuum; nervousness on one end, excitement on the other, an optimal place for best performance being in the middle with both nervousness and excitement being experienced. Upon closer analysis, other factors besides positivity and negativity determined the level of excitement: (a) competition of the meet, (b) the pressure placed upon them, and (c) their enjoyment of racing. In the remainder of this section on excitement, negativity versus positivity and the factors of excitement will be described.

Negativity versus positivity. For most of the elite swimmers in this study, nervousness was associated with negativity while excitement with positivity.

> I think nervous as more of a negative connotation, meaning you're not ready to go. You're nervous and maybe not relaxed enough to compete on the highest level where excitement means that everything is in place for the possibility of a great swim. I think nervous is more of an insecure feeling whereas excited is more of a confident feeling.

> Physically, I would say that being excited, having my confidence, you feel stronger. You might have more of that competitive edge than more of a nervous feeling. I think it is just getting mad, blood flowing in that feeling of being in the race. By doing that certain speed it kind of simulates how the race is going to feel, which gets me excited about the race (Peter).

Peter described how his body got ready for the race. He later added, "It's more of like a shot of adrenaline. It just kind of gives me that rush. It's not as nervous as much as it is excited. It's like, 'This is it. Let's do this. I'm ready to go.'" But at another time, Peter described his "amped" feeling of the adrenaline as a "nervous" feeling that "[wa]s not a dangerous level of nervousness, it's just the right amount where I can do my best performance because I'm not so excited and amped up to swim that race as hard as I can. I'm excited as I possibly can be." It seemed that excitement was positive and nervousness was negative, but he experienced both sensations, to a varying degree before swimming his best races. In other words, as Garrett states, "It's good to get a little nervous and excited."

Like Peter, Ricky, who reported that nervousness was a problem for him before swimming (see *Mental Comfort* above), described nervous as negative as well.

> Nervous probably goes with… you know what happens if I don't make this Pan Pac team, the 200 freestyle is the best chance to make this team I have to do it now [negative]. Excited is now about to swim as fast as shit. I'm about to win this race. I'm about to go 1:45 in the 200 freestyle [positive]. So, nervous is just kind of the outcome.
>
> Excited is you know you're about to swim really fast and overwhelmed with energy.

And yet, he saw "Nervousness [as] a good thing. Every swimmer gets nervous, well, I think every swimmer gets nervous. You let nervousness get you excited for the race." Again, like Peter

and Garrett, there was a symbiotic relationship between this negative nervousness and positive excitement. One needed to experience some nervousness to be totally prepared for the race and heighten the excitement. This type of description demonstrated the paradoxical interpretations that the swimmers used to denote this obfuscation of the terms.

Aaron seemed to interpret this interaction of nervousness and excitement the best out of the participants. He basically termed positive excitement as "good nervousness" and negative nervousness as "bad nervousness."

> I think, I also categorize excited as being nervous as well, I think, maybe. It's just your mind telling your body it's time to go and you know it's race time. There is a good nervous [excited] and there is a bad nervous [nervous]. Definitely. You know, you're just, yeah… by then that confidence comes in. You are kind of nervous and you feel that you need to feel something otherwise… you need to feel some sort of excitability or something like that. You know, the sport does mean something to us and we want to do well and we definitely want to see all the work that we did come to fruition. So, there is that excitability of getting ready to race. (Aaron)
>
> It's not that I don't get nervous. I've held the notion that if I ever stopped getting nervous [excited] I should probably retire. In a sense, it's not that you don't care, it's that you can use that, you know. That's how your body gets ready. Your body is telling you that you need to get going. And if I ever got to the blocks and I was like, "Who gives a fuck?" then I'm not sure that that would be completely acceptable. Especially, at that level. I would hope that you are nervous enough to care a little bit about what's gone on during the race (Aaron).

The excited, or “good nervous,” or nervous, “bad nervous,” feelings that most of the participants encountered were dependent on their state of mind at the moment, not the preparation that their bodies made through the use of adrenaline. If they interpreted the situation as positive, then they were excited and swam their best. Conversely, if they experienced the moment as negative, then their bodies were prepared to swim but they felt as if the race was looming large, out of their control, or, they did not necessarily feel like racing, as when the competition is lacking and they are tired from training. And yet, paradoxically, as described above, the swimmers feel a little bit of both excitement and nervousness because they do not know the future, or outcome, and they care about how they swim. Therefore, it was the amount ascribed to nervousness or excitement that was significant. Again, Aaron stated:

> I would probably define [excitement and nervousness] as different things. You can be nervous and be excited or you can be nervous and freaking out (chuckle). You know,… there is definitely a line that can be crossed with nervousness and sometimes people cross that [line].

“Freaking out” was the result of letting thoughts that did not prepare them for the race affect their performance adversely. “And I also think it depends on how well you handle that ... You can use it to wear yourself out, I mean usually guys that are just nervous all the time and they’re moving all around and can’t stop walking around and twitching” (Aaron). An athlete either allowed the negative or distracting thoughts affect him, or he distanced himself from those thoughts and performs well. This was exactly what happened to Aaron during his last Olympic experience.

Aaron, who is normally very laid back and easy going, was portrayed as uncharacteristically nervous. Throughout the narrative, the coach was continually monitoring Aaron's feelings of nervousness. Aaron stated,

> "'I just keep telling myself to shut up and not listen to some of the thoughts rolling through my head.' He smiled. 'I always get a little nervous and I think that is a good thing. But, it's a little much today. I will just have to spend a little more time relaxing and being in the water ... it has always had a soothing effect for me.'"

When the negative thoughts continued to plague Aaron, he tried to turn his attention towards other things, such as hanging out or getting in the water, the comforting parts of his routine. Aaron had not slept well the night before the 100 backstroke finals at the 2008 Olympic Games. Part of this was due to the finals being in the morning, which was unique to this meet. He had the night to deal with thinking about the race the next morning and the fact that he had slipped on the pads in the semi-finals. The lack of sleep was dealt with by the application of his normal routine and shooing away thoughts that might hinder his race.

> I just told myself, 'just don't fucking slip.' … And I carried the notion that I can only control what I can do. I've always understood that I can't control what somebody else is going to do … But I knew that if I got off with a good start, then I would be in the race. I've always known I can swim better than anybody between the walls. Just that little bit of confidence ... have that level of knowing that I had trained hard the whole year and did everything I possibly could and as long as I had the blocks with no regrets and no doubts, I could just get out there and do what I could do."

Aaron employed confident thoughts based upon his training and past successes to relieve the anxiety felt by the nervousness for the race. These were the normal thoughts for Aaron when

dealing with any race, especially this race, the one that gave him anxiety. He did not deviate from his routine, which gave him extra space to deal with the unexpected nervousness he felt.

Ricky also described dealing with nervousness during his Olympic Trials experience. At that meet, Ricky needed to finish in the top six swimmers to qualify for the Olympics. Between the morning and evening sessions, as noted above, Ricky asked his brother to keep him company so that he could calm down. Realizing that this was not ending his nervousness, he sought more help. He recognized that he was scared of "people sitting (in the) stands, letting my parents down, or embarrassment for my parents or embarrassing myself or something like that, not meeting expectations, or something like that." This had started his freshman year when, leading to NCAA, he had read message boards. "It was kind of like I had all these expectations to live up to and I'm not going to meet all of those. I think, definitely, getting behind the blocks, everyone thinks I have to do this and everybody thinks I should do this, this, and this and that's probably what really got me nervous." He stopped reading those boards, but he felt as though he needed to live up to a standard that was not actually there. In response, he changed his routine, he now manages this feeling of expectation. The factor of expectations can bring an elite athlete to nervousness.

Other factors of excitement. The experiences described by Aaron and Ricky above demonstrated how too much nervousness affected elite swimmers. Both athletes used their routines to both prepare physically and mentally to swim their fastest. Both nervousness and lack of excitement were factors that stifled or reduced excitement. In both cases, the routine still prepared the participants to either overcome their negative thoughts and/or assist them in swimming well. Several factors also influenced excitement. First, the level of competition helped determine if the participants experienced excitement.

> In Montréal [a tune-up meet four weeks before Pan Pacific Trials], I didn't get excited but I had some good races. It's hard sometimes to get up for races when the meet is small or there's no competitors there. The 200 free in Montréal, I was the only fast guy in that heat. In the morning there wasn't a great amount of competition, I mean there was, but it wasn't a huge meet and I wasn't nervous (Garrett).
>
> I think the level of the meet definitely has something to do with it. A bigger competition yields more excitement than a smaller one. It's because I know there's much more at stake and it's an opportunity that I've been training for a long time. So, if higher stakes. Better competition, better facility, better atmosphere ... I can think of plenty of races. None of them were at high-level meets though. I can tell you about age group meets that I've been to that I don't get that rush" (Peter).

The lack of excitement was depicted as only affecting these swimmers during mid-season meets, not elite meets like World Championships or the Olympic Games. Or as Ricky described, "The atmosphere, the kind of atmosphere we're in, what kind of meet it is, what kind of position I'm in, definitely the way I've been feeling mentally and stuff," lent to the excitement.

During meets like the Olympic Games, the atmosphere created by the level of competition added to the excitement, which assists the swimmers in performing at their best. In particular, watching the fast swims in this high-caliber competition heightened excitement. "You know, you want to get a chance to kind of talk to some people to see what they're doing [fast swimming] and get excited for the day to come. It's all about staying relaxed and staying kind of

easy-going" (Garrett). As these swimmers went through their routine, they noticed the fast swims of others and used that to fuel their excitement.

Finally, excitement was built because these elite swimmers knew they were going to race. Ryan was the best example. "I'm always excited. I love the racing. I love being able to step up on the blocks and race someone next to me. That, that is excitement. That's what's fun" (Ryan). Ryan was always excited to race. It was the racing that drove him in the sport. In the purest sense, he swam for the love of racing. It was where he was most comfortable, which kept him from experiencing nervousness.

> Since [I was] eight years old I've never been nervous for a race. Because the way I look at it ... the reason why I don't get nervous, are two things. One is I don't let swimming own my life. It's just something I do for fun. And so no matter what the outcome is, I'm still going to be the exact same person as soon as I get out of water. I'm going to be that laid-back, happy-go-lucky, happy, wild Ryan Lochte. So no matter what, I'm going to be the same person. The second thing is, is that I don't care if I win or lose. I'm swimming because I'm having fun. Like, I like racing. It's the competitive edge. I like challenges. I just like racing.

The best analogy would be kids playing a pick-up game of basketball. They were playing because they liked the game, they liked being social, they liked the competition. They did not worry about winning or losing. The kids played because it was fun and exciting. Ryan saw his swimming in this manner. He was going to compete to the best of his ability to see what was going to happen. For him, he knew that "I'm going to be stepping up on the blocks is my comfort level. That's where I'm at ease. That's me knowing that I'm going to step up on the blocks pretty soon and racing. That's where I'm at my most comfort." When Ryan heard the

whistle to get on the blocks, seconds before the beginning of the race, he got his adrenaline rush. This was the culmination of his excitement experienced throughout the race day. “I get excited the whole time I’m at a swim meet, I’m excited all the time because I know I’m going to be racing” (Ryan). Peter echoed the same sentiment, “Usually I’m excited because I know, you know, within a few minutes I’ll be racing and thinking about that is exciting.” This perspective of being excited just to race, especially at major competitions, was experienced by all the swimmers in this study. Competition might stifle the excitement at lower meets, but, at elite competitions, after following their routine, and possibly dealing with some nervousness, these athletes will be excited because they are about to race.

Fun

In addition to excitement positively affecting performance, each participant recognized the importance of fun on the day of competition. Ryan talked about having fun during an elite swim meet. He flatly stated that if he did not have fun, then he would quit swimming. Fun was not determined by success, i.e., winning. Fun was being with friends and competing; winning just helped the meet to be more fun. All the participants in this study talked about fun as imperative to their swimming experience and something that was part of their competition routine. As Ryan states:

> I don’t have to think about swimming or get serious about it. I can just be myself and have fun. It’s how I relax because I’m not thinking about anything. I already know what I need to do and I’ve done it so many times that I don’t have to think about anything. I can think about other stuff like having fun, joking around, talking to my friends, and stuff like that.

In other words, “I just go have fun with what I’m about to do” (Garrett), which was “joking around with guys, watching people swim fast, talking to guys about hot girls that are around, joking with Ed, getting something good to eat I mean, yeah, tons of things ... [and,] you know, the fun for me is winning” (Garrett). Or, as Peter states:

> Meets are fun because they’re exciting. They’re also more fun if I’m competing well in reaching my goals. I think being in that atmosphere is something that I enjoy. So, it’s fun ... You know, catching up with friends, people that I haven’t seen, teammates from the Olympics, hearing stories, you know, just talking, I enjoy that. And racing well. Feeling good in water. That all ties into the excitement of the event, which, I think it and the excitement of fun are closely linked. (Peter)

Fun, as described by the participants, had several aspects. They experienced fun through the atmosphere of the meet, interacting with friends and competitors, and, as a result of racing fast, by completing their goals.

The first type of fun experienced by these elite athletes was the overall, or overarching, excitement of participating in a high-level meet. As Peter said above, fun was being part of the atmosphere at elite meets in which fast swimming occurred. In other words, “That all ties into the excitement of the event, which, I think the excitement and fun are closely linked” (Peter).

For Peter, the fun of the meet was the atmosphere. It was being part of intense competition and the place where he could complete his goals of the season, maybe of a lifetime. Further, a meet was different than the drudgery of practice. “Any meet is just fun and exciting just because you’ve been training month after month after month and the fun part is the racing ...” (Ricky). These athletes went through the pain day in and day out. The fruit of the labor was seen when they competed in their focus meet, which was the meet for which they were rested the

most. When the meet had lower level competition, like a mid-season meet or tune-up for the season's focus meet, the fun was missing. "I can tell you about age group meets that I've been to that I don't get that rush and it's no fun" (Peter). Missing this kind of fun did not necessarily lead to poor performance, but did diminish the enjoyment of the event and the time spent at the competition. Besides the fun atmosphere of meets, more specifically and more importantly, was the fun of interaction with friends, coaches and other competitors.

The second and most influential to the experience of fun was the interaction with friends, other competitors and coaches. "Fun at a meet… you know, is social, swimming well, feeling good. You know, you're outdoors, good atmosphere. And that's good, that's fun. That's why I started swimming in the first place" (Aaron). Even in one of the most nervous situations of his career, the 100 backstroke at the 2008 Olympics, as reported above, it was still fun for Aaron because of the social aspect.

> Yes, yes it was. It was a fun day. But it was a nerve-racking day. Well, at least before 10. I was happy I was there, yes. I was happy that I put myself in that situation and I put myself in that position. I felt like I could swim a good swim, but I was also, "what if this happened?" I was like come on, stop thinking about that stuff. I was probably just a little bit more on edge, you know, [my coach] also slapped me around a little bit, like, 'Come on, go have fun.' I was like, 'Yeah, you're right.' That helps too. That's what coaches are for as well, they can kind of center you and bring you back to the middle. A world record without having fun? I don't think so. But there are races where I haven't had fun, for sure. You try to avoid those.

The atmosphere and the interaction with his coach helped Aaron get through the day and deal with this nervousness. As Ryan asserted in agreement, "I mean, I will, I won't not have fun.

I've never not had fun. I just know it because when I see my friends I haven't seen in a while and that's fun. I'm going to… either way I have fun there ... I mean I just have fun and joke around with everyone." The social component of the meet, one that was part of the routine on a competition-day, provided fun and comfort, and superseded having fun by winning the race. "Yes, you absolutely can ... I didn't win a race and I had fun. You know, I didn't swim the greatest times but I still… I enjoyed being with those guys behind the blocks, and in the ready room, and on the podium, and all that, yeah, I still enjoyed myself" (Aaron). The time with friends was a major part of fun at meets. This was why these swimmers enjoyed what they did, and, in Ryan's case, why he continued his swimming career.

The final manner in which these athletes had fun was through racing fast and accomplishing their goals. "Swimming fast is a fun meet" (Ricky). When these athletes swam fast, they experienced the fruits of their hard work and, as seen in their successes, accomplished their goals. "This is the point of swimming and that sense of doing what you set out to do is fun" (Garrett). "The whole thing of swimming, the whole goal is to swim fast and reach these goals that you set. Training for so long and not achieving that is not really much fun. To have that happen a couple of seasons in a row is extremely not fun" (Ricky). Or, as Peter puts it, "Meets are fun because they're exciting. They're also more fun if I'm competing well and reaching my goals." It seemed that the fact that they won was not the entirety of this type of fun they experienced, but rather it was the completion of their goal. As seen in the quote by Aaron in the last paragraph, he didn't win a race, however, by making the USA Pan Pacific Team, his goal was realized for the summer--he was going to be part of the most elite meet of the year.

Overall, there are three kinds of fun. First, there was the intensity of the elite meet, the atmosphere. Second, and most influential, was the interactions with friends, coaches and other

competitors. Finally, there was the fun of swimming fast. All were provided through the competition-day routine. Going through the tasks that allowed time for experiencing these factors of fun was essential for the motivation and careers of these athletes. In other words, as Garrett stated, "You know the fun for me is winning. And being around the guys. And being excited" (Garrett).

Section Summary

There were three by-products of a competition-day routine: enjoyment, excitement, and fun. The participants in this study swam because, when they went to competitions, they enjoyed what they were doing; were excited to race; and had fun in competing, accomplishing goals and interacting with others. Curiously, none of the literature reviewed for the present study referred to these aspects of Olympic or elite competition. The closest findings were assertions that the better performing athletes were positive while the lesser performances were produced by athletes experiencing negativity (Orlick & Partington, 1988; Gould et al., 1992a, 1992b, 1993, 1999; Greenleaf et al., 2001). Positivity was an aspect of excitement, not the entire by-product of excitement. Enjoyment, excitement and fun were all seen as positive, and in that manner, these by-products related well to past research. However, these by-products as part of a competition-day experience were not explained in any detail. Further research might include these aspects as part of a competition-day routine or the experience of elite athletes during competition.

Definition of a Competition-Day Routine

Based on the analysis of data from interviews with and observations of the Olympic gold medalist male swimmers in this study, as presented in this and the preceding chapter, a competition-day routine for elite swimmers was defined as a flexible, sequenced set of learned, automatic tasks that were employed to allow the athletes to stay comfortable and relaxed on a

day of competition. Through an ongoing process of trial and error, tasks were learned that helped the athletes adapt to both their environment and self, resist undo nervousness, and keep focus while, secondarily, enjoying their experience at the meet through excitement and fun. The competition day was interpreted as the time from when the swimmer awoke until they went to bed. Within that day, the focus was the actions taken until their athletic performance. As the data was collected and, consequently, analyzed, the pattern of actions used by the athletes to prepare for the competition was executed. This pattern, which was similar for all the gold medalists in this study, was repeated for each session of the competition.

Summary

The purpose of the competition-day routine was to be comfortable and focused on the day of competition. Comfort was described as knowledge-based (knowing what they were doing would make them prepared to race), mental (keeping away distracting thoughts), physical (being warm and ready to race), and combined (when both mental and physical were ultimately comfortable). Focus was a second purpose. Focus was described in one sense as keeping away distractions as well as not participating in actions that could lead to distractions, i.e., battery loss of music player. In addition, focus could be the concentration on some related aspect of the competition such as the finals race.

Enjoyment, excitement and fun emerged as by-products of a competition day routine. The athletes in this study enjoyed their jobs. They were excited physically to race their best, mentally through the level of competition, or because they knew they were going to race. Fun was interaction with friends, competitors and coaches. Fun was connected with winning in that they were accomplishing goals. These by-products were planned into their routine, in their downtime, and were as important as any other aspect of their meet experience.

Based upon the descriptions, attributes, purposes and by-products that emerged from the data, a competition-day routine was defined as:

> a flexible, sequenced set of learned, automatic tasks that are employed to allow the athletes to stay comfortable and relaxed on a day of competition. Through an ongoing process of trial and error, tasks are learned that help the athletes adapt to both their environment and self, resist undue nervousness, and keep focus while, secondarily, enjoying their experience at the meet through excitement and fun.

The present study has added to the literature by describing and defining a competition day routine. This substantive grounded theory needs future research in other sports, genders and contexts to continue to build, define, and further our understanding. It is my hope that future research would investigate the aspects of the findings and help athletes create, maintain, and enhance their competition day routines.

Study Implications

The purpose of this study was to identify the action Olympic medalist male swimmers undertake on a competition day that they believe is critical to their success. The secondary purpose was to understand the meaning these athletes gave to these actions. As presented in this study, the attributes, purposes and by-products of a competition-day routine helped the participants be prepared for successful performance. Based upon these findings, there were four implications for coaches and athletes.

First, all the actions of athletes on the day of their performance had meaning and each task served a purpose. Whether at breakfast or warming-up in the pool, these athletes took actions that helped them stay comfortable or focused. If coaches had an athlete who was too nervous or anxious, the evidence from the present study suggested several alternatives that were

testable for effectiveness through trial and error. Considering that most of the participants in this study learned what actions helped them to remain relaxed and concentrate on pertinent information were modeled by coaches, teammates and competitors, coaches should remember to help their athletes to watch others or suggest actions that help them to relax. Athletes should talk with each other and discuss what tasks and actions help them to be comfortable and focused as well.

Second, the definitive attribute of a competition-day routine is flexibility. There were many times when I heard parents tell their swimmer that "whatever you ate for breakfast this morning, eat it every morning" because their child swam well. Typified in this comment was the thought that something they did should be repeated for future success. However, as this study showed, it was more the ability of the swimmer to adjust to diet, change of schedule, inadequate equipment or their own nerves within their routine that allowed them to remain comfortable and focused on those tasks that were truly proven to have them prepared to perform. Athletes should be encouraged to try new actions or shown how to adjust quickly to changes within the competition day in order to get back to their routine.

Third, continued and extended concentration on a specific race seemed to have a detrimental effect on performance. Participants were stratified by past elite success and correlated the amount of cognitive energy and time spent on mental preparations for the race [see Table 5.1]. Although there might have been a personality effect, i.e., not concentrating on a race or being laid back was part of the most successful athlete's demeanor, there was sufficient evidence to suggest that athletes who focused overmuch on their race were impeding their performance. If an athlete had performance anxiety or spent much of their time focused solely

on their race, coaches should talk with their athletes about reducing their thoughts of racing until an appropriate time such as twenty to thirty minutes prior to performance.

Finally, even at the highest levels, sport was shown to be enjoyable, exciting and fun. All the elite swimmers in this study enjoyed swimming. Their delight was not defined by success nor did it define them as individuals. Swimming was what they did. They were, of course, very good at swimming. More importantly, they thrived in this environment: talking with friends, catching up with individuals they did not see on a regular basis, and being part of the excitement of fast swimming. For coaches, this was a key finding. Athletes must find enjoyment and fun in their sport, regardless of success or level of competition. As shown in this study, when the time came to focus, prepare and compete, the athletes took the necessary steps to ensure success. During time when there were no specific tasks to be completed, athletes needed to engage in relaxing activity. If an athlete is not able to have fun or enjoy a competition, a coach must help the individual to find satisfaction outside of the competitive aspects of the meet.

The present study provided a substantive grounded theory of a competition-day routine. The attributes, purposes and by-products helped the participant Olympic gold medalist male swimmers to be prepared and perform at the highest level within the sport. There were several implications for coaches and athletes, which were presented in this final section of the study. My hope in conducting this study was to supply coaches with pertinent information that would help athletes prepare and perform with greater success. Considering the validity and reliability of the data and deep description provided by participants during interviews and observations, the present study has accomplished this goal.

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APPENDIX A

INFORMED CONSENT

ATHLETE CONSENT FORM

I agree to participate in the research entitled AN ANALYSIS OF OLYMPIC MEDALIST MALE SWIMMERS' ROUTINES DURING COMPETITION**,** which is being conducted by Matthew A. Grant, Sports Instructional Research Lab, Department of Kinesiology, 300 River Rd., University of Georgia, Athens, GA, 30633, Telephone: (706) 542-4210, under the supervision of Dr. Paul G. Schempp, Department of Kinesiology, (706) 542-4379. I understand that this participation is entirely voluntary; I can refuse to participate or withdraw my consent at any time without penalty of loss of benefits to which I am otherwise entitled and have the results of the participants, the extent that it can identified as mine, returned to me, removed from the experimental records, or destroyed.

The following points have been explained to me:

1) The purpose of this study is to identify the action Olympic medalist male swimmers undertake on a competition day that they believe is critical to their success. The secondary purpose is to understand the meaning these athletes give to these actions. Through a constructivist grounded theory approach (Charmaz, 2006), this study will create a substantive theory regarding these critical actions and their meaning for elite performers. To this end, this study will address the following questions:

1. What behavioral routines do Olympic medalist swimmers perform on the day of a major competition?
2. Which of these behaviors do Olympic medalist swimmers believe is necessary for their success?
3. What is the underlying meaning of these behaviors for the Olympic medalist swimmers?

2) By investigating the routines of elite athletes, each participant will gain insight into the underlying reasons for their personal competition routine as well as gain knowledge from the comparison between what they do before meets and the competition routines of other elite athletes. This can lead to better understanding of his sport and actions at meets. In the end, this new knowledge could help the athlete better his performance, which could lead to increased success, sponsorship or future earnings.

Beyond the personal benefits for participants, the analysis of the competitive routines will help coaches to understand factors that lead to better performance. This could lead to better performance for athletes who need to revise their competitive routines. The findings could also influence athletes in other sports, especially considering little research has investigated the actions of athletes during competition.

3) **If I volunteer for this study, I understand that I will be asked to be involved in the following things:**

A. Two-Day Visitation

I will be observed before the competition at my training site. The purpose of this visitation is to (a) observe the swimmer in his preparation, (b) conduct the initial interview, (c)

become acquainted with the swimmer's competitive environment, and (d) add depth to this study through unstructured interviews.

B. Initial Interview

I will participate in an audio-recorded interview that will investigate my competition-day activities when I won my Olympic medal. An object that is connected to the event, i.e., a picture of my participation in the Olympics or my Olympic medal, might be asked to be brought to the interview for description. Similarly, a tour of the training facility or my home might be beneficial, if it is possible to arrange and is comfortable for me.

C. Competition Observation

I will be observed throughout the competition for one preliminary and finals session of a championship meet. The competition observation will occur from August 3-7, 2010 at the ConocoPhillips National Championships in Irvine, CA. The primary researcher will have access to all public activities during the meet. The focus will be on the activities of the athletes on the day of competition.

D. Follow-Up Interview

I will participate in an audio recorded interview conducted via telephone within one week following the meet observation. The focus of this interview is to examine the activities observed at the meet and to define the necessary competition factors determined in the Initial Interview.

4) The discomforts or stresses that may be faced during this research are:

Negative memories of low points in the participant's swimming career or in his performance during observations might surface during an interview. I have the right to skip any questions I feel uncomfortable answering.

5) I understand that information will be individually identifiable when published, presented or made available to the public. The audio-recordings, photographs and transcripts will be stored in a secure place in the lab. The only people having access to these documents will be the principal investigators. Selected photographs may be used in publications or presentations with the permission of the participants.

The researcher will answer any further questions about the research, now or during the course of the project, and can be reached by telephone at: 706-542-4210.

My signature below indicates that the researchers have answered all of my questions to my satisfaction and that I consent to volunteer for this study. I have been given a copy of this form.

Matthew A. Grant	_____	_____
Name of Researcher	Signature	Date

Telephone: 706-542-4210
Email: grnt2211@uga.edu

_____	_____	_____
Name of Participant	Signature	Date

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

COACH CONSENT FORM

I agree to participate in the research entitled AN ANALYSIS OF OLYMPIC MEDALIST MALE SWIMMERS' ROUTINES DURING COMPETITION**,** which is being conducted by Matthew A. Grant, Sports Instructional Research Lab, Department of Kinesiology, 300 River Rd., University of Georgia, Athens, GA, 30633, Telephone: (706) 542-4210, under the supervision of Dr. Paul G. Schempp, Department of Kinesiology, (706) 542-4379. I understand that this participation is entirely voluntary; I can refuse to participate or withdraw my consent at any time without penalty of loss of benefits to which I am otherwise entitled and have the results of the participants, the extent that it can identified as mine, returned to me, removed from the experimental records, or destroyed.

The following points have been explained to me:

1) The purpose of this study is to identify the action Olympic medalist male swimmers undertake on a competition day that they believe is critical to their success. The secondary purpose is to understand the meaning these athletes give to these actions. Through a constructivist grounded theory approach (Charmaz, 2006), this study will create a substantive theory regarding these critical actions and their meaning for elite performers. To this end, this study will address the following questions:

1. What behavioral routines do Olympic medalist swimmers perform on the day of a major competition?
2. Which of these behaviors do Olympic medalist swimmers believe is necessary for their success?
3. What is the underlying meaning of these behaviors for the Olympic medalist swimmers?

2) By investigating the routines of elite athletes, each coach will gain understanding into the factors that lead to better performance. This could lead to better performance for athletes who need to revise their competitive routines. The findings could also influence athletes in other sports, especially considering little research has investigated the actions of athletes during competition.

3) **If I volunteer for this study, I understand that I will be asked to be involved in the following things:**

Coach Interview

I will participate in an audio-recorded interview during the two-day visitation of the investigator to my training facility. The focus of this interview is to examine my observation and

understanding of the development and performance of competition-day activities of my Olympic swimmer who is participating in this study.

4) The discomforts or stresses that may be faced during this research are:

Negative memories of failures during the coach's career might surface during an interview. The participant have the right to skip any questions they feel uncomfortable answering.

5) I understand that information will be individually-identifiable when published, presented or made available to the public. The audio-recordings, photographs and transcripts will be stored in a secure place in the lab. The only people having access to these documents will be the principal investigators. Selected photographs may be used in publications or presentations with the permission of the participants.

The researcher will answer any further questions about the research, now or during the course of the project, and can be reached by telephone at: 706-542-4210.

My signature below indicates that the researchers have answered all of my questions to my satisfaction and that I consent to volunteer for this study. I have been given a copy of this form.

Matthew A. Grant	_____	_____
Name of Researcher	Signature	Date
Telephone: 706-542-4120		
Email: grnt2211@uga.edu		
_____	_____	_____
Name of Participant	Signature	Date

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX B

INTERVIEW GUIDE(S)

INITIAL INTERVIEW

Thank you for taking the time to sit down with me and answer some questions. The focus of this study is what you did, that is, what actions you took, on one of the medal winning days during the Olympics. To start, I would like to learn a bit more about your experience at the (year) Olympics.

1. What were some of the memories that stick out in your mind from your Olympic experience?
2. Which day was the most successful day for you? What made it so special?
3. Let's talk about that day. Starting with when you got up, what would I see you do if I were standing beside you? [Follow-up questions as the informant talks about that day.]

FOLLOW-UP INTERVIEW

Thanks again for taking part in this study. In our last interview, we talked about the actions you took on a medal winning day at the Olympic Games. What I would like to do today is talk a bit more about each action and what the purpose of each action is for you. Starting at the beginning of the day, you talked about … (wake-up swim, eating, catching the bus, packing your bag, etc.).

1. What is the purpose for this action?
2. Describe to me a time when you did not do this action. Were you as successful?
3. Where did you learn to incorporate this action into your competition-day routine?
4. How would you describe the importance of this action to another swimmer?

COACH INTERVIEW

Thank you for taking the time to sit down with me and answer some questions. The focus of this study is what [the swimmer's name] does, that is what actions he takes, on a competition day during an elite meet.

1. I would like to start with some of the actions your swimmer described. If you have seen him do this action, please describe to me what you would see him do. [I would go through the list of actions described by the swimmer.]
2. What would you see your swimmer do if they are having a successful meet?
3. What would you see your swimmer do if they were having a less successful meet?
4. Did you teach them these actions? If so, what is the purpose?
5. What actions are unique to your swimmer?
6. Describe to me what you would see in your swimmer if you knew they were going to do well?

APPENDIX C

FINAL GROUNDED THEORY MEMO

This chapter presents a narrative description of five male swimmers' experiences from the day on which they won their Olympic gold medals. Based upon multiple interviews and an observation during an elite swim meet, this one day depiction combines the true experiences of these participants into one amalgamated day of competition at an Olympic Summer Games. The challenge in presenting this narrative is reconciling differences between the participants experience at the 2008 Beijing Olympic Summer Games and the normal routines of these elite swimmers at an elite international swim meet in which the finals are always in the evening. For example, due to television demands, Beijing was the only Olympic Games in which the finals were swum in the morning. Consequently, all the swimmers in this study swam wake-up swims prior to breakfast. However, during the follow-up interviews, only one swimmer, Garrett, stated that he would always take a wake-up swim.

A second departure for the experiences of the swimmers is the role of the primary researcher within the story. In this narrative, the story is told from an assistant coach's point of view. The primary researcher has never been an Olympic coach. The decision to take this role within the story allows the account to be told by someone who has access to all the athlete venues, including the Olympic Village and swimming venue, which includes the team area, warm-up pool, and competition pool deck. The descriptions of the setting are based upon observations during the ConocoPhillips National Championships in Irvine, CA, in which the primary researcher had access to all the athletes' facilities, as well as the vivid accounts provided by the athletes during interviews. Additionally, the conversations depicted in the story are direct quotes from the interview data. Although these conversations are situated to fit the story, all the words and actions taken by the swimmers portray the accounts given by the participants during actual conversations.

A final change from the actual lived experience is the events swum during the day of competition. In order to frame a narrative from the stories of the five swimmers, some scenarios that might seem unrealistic for a reader who has attended the swimming competition of an Olympic Summer Games were created for the setting of this story. Specifically, this composite day of competition describes both the men's 100 backstroke and the men's 200 backstroke events as well as the men's 400 freestyle relay and the men's 800 freestyle relay, which would not occur on the same day in any international championship meet.

In all these changes for the readability of this study, the discrepancies do not occur in consequential details as delineated in the purpose of this study. Each episode has been selected for its value in describing the routines of each swimmer and provides the foundational premises for creating a theory.

The morning swimming session results had represented the USA quite well. All went according to plan with most of our athletes moving on to their respective next levels of races. Of course there are always a few surprises, but all the favorites to win an Olympic gold medal were in tonight's finals. The media had gotten what they had paid millions of dollars to broadcast, probably the closest, most exciting races of the entire meet. Although tonight's competition had a full finals docket, my focus was on the 200 backstroke, 400 freestyle relay, 100 backstroke and the 800 freestyle relay, all events that were featuring my favorite five swimmers.

As an assistant coach, my responsibilities to the team depend on the needs of the team and the duties placed on me by the head coach. For this summer games, one of my jobs was to look out for the needs of Ryan Lochte, Aaron Peirsol, Garrett Weber-Gale, Ricky Berens and Peter Vanderkaay during the nearly month long training camp and nine days of competition.

These athletes' year-round coaches were around during camp and were only a phone call away at the Games, but as a member of the Olympic staff, I had the deck pass and so, when dealing with warm-ups, pacing, and maybe a friendly chat, I was the primary person of support. This could have been a difficult job, but looking back at the first eight days of competition and compared to my other jobs, taking care of these guys was relatively easy. I had anticipated running around with my head cut off trying to aid in the unique characteristics of these athletes' competition-day routines. Maybe one needed a specific masseuse or a particular food in order to be ready to swim the race of their life or maybe the personalities would make the demands harder than what I could provide. None of these fears came to fruition. As different as they were, they were very similar in what they did and what they needed. Let me give you an example ... um, ... oh, this morning, before arriving at the preliminary competition, was a perfect demonstration of what my swimmers typically do to get awake. From this, you can get a sense of how their routines are so similar and yet their personalities shape what they do.

My morning started at 6:15 AM with a wake-up swim with Garrett and Ricky. Both wandered onto the deck of the Olympic pool situated in the middle of the Olympic Village around the same time. Garrett, a 6'2" sprinter, walked slowly, yet efficiently across the concrete with his sneakers, warm-up pants and parka, a towel perched on his shoulder, head slightly bowed. As is his trademark when needing some privacy, the hood of the parka was over his head and music playing through his headphones. Garrett has qualified for the 50 freestyle and 100 freestyle individually, setting American records to attend his first Olympics. Although he did not medal in these events earlier in the meet, he did win gold as part of the 400 medley relay. He has been training with Eddie Reese, the head Olympic coach for the men, since college and of the three of my swimmers that train in Austin, TX, Garrett is the most business-like, intense

personality. For example, earlier in the trip, Garrett and I were talking about what swimming meant to different people. When I mentioned that some of his teammates thought of what they do as simply "just swimming," his head tilted forward, eyes looking down for an instant. Garrett then raised his gaze, looked directly at me and said, his voice growing with pitch and intensity, "You know, yeah, sure we just swim in the sense that it's not life or death, but it's not just swimming, this is our career, this is our livelihood, I don't work my ass off or bust my butt all year round to go have a shitty meet or something. It's not just swimming, and needs to be taken seriously, you know, I'm not going to die if I don't swim well, but, it's not just swimming. It's my livelihood. It's what I want to perform well at." He was not angry or upset, but matter-of-fact in his insistence that at the end of the day, taking care of business with passion and resolve is how he has achieved his success to this point.

As Garrett slowly prepared to jump in the water, Ricky walked onto the deck rubbing his eyes and yawning. It would be quite a while before he would touch the water, although I sincerely believe that this is done intentionally. To say that Ricky takes his time getting into the water would be an understatement. Eddie joked with Ricky the entire training camp leading up to the Games that it was fine for *him* to take his time because he doesn't like to warm-up and probably skips most of it anyway. Ricky is the youngest of my swimmers, having just finished his college swimming career last year. He is quick to crack a joke and a smile, although he has a way to avoid being the constant center of attention. Enthusiastic and outgoing, Ricky showed the excitement of this time, this meet, in every expression, except his attempt to enter the water at 6:24 in the morning. A grunted good morning was followed by a sit in a chair. Garrett hit the water with a soft splash. None of the others would be around until breakfast.

After Ricky finally found his way into the water, both swimmers went about 300 meters with some build up or fast 25 meter swimming in order to get their blood moving this early in the morning. Garrett mentioned that his legs felt a little tight and so he kicked with a kick board for an extra 50 meters or so to shake them out and loosen up. When he finished his kick, Garrett stopped by the edge of the pool, arms draped over the lane lines between the first and second lane, body limp.

"How ya feeling?" I asked Garrett after about 30 seconds of no movement. Garrett turned his head towards me.

"I guess I'm ready to move on to breakfast."

"If you're not, then stay as long as you need. I have nowhere else to be," I stated as the distinct smell of coffee wafted by as another coach from France passed me with his first cup of the day. It could wait a few more minutes.

"Yeah, I'm just deciding if I'm ... I'm just going to chill out for a few minutes." His face had no expression. It had been a long meet already for Garrett. He would be ready for today's race, it just might take a little more than earlier in the week. A few more seconds went by and then he swam another 100 meters with some sculling mixed in to warm up his upper body. Arriving at the end of the pool where I was standing, he paused and looked up. He was good.

Ricky had climbed out of the water, dried off and dressed back into the clothes he wore to the pool. Garrett did the same. They seemed a bit more awake, moving with more rhythm and easier than they had arriving only 30 to 35 minutes previous. They returned to their sparsely furnished dorm rooms and I left for the cafeteria to grab a cup of coffee, maybe an easy conversation or a newspaper to read. It would be another hour and a half before I would need to be concerned with my swimmers. This was my little calm before the storm of the final day of

the Olympic swimming competition when I could collect my thoughts, relax, and maybe learn what else was going on in the world. We all had been in this little bubble of a world for eight days. We had each other's routines down pat because of the focus that each of us needed to compete at this meet. I knew what my swimmers would need, for the most part, and also that I needed this space, and that stiff cup of coffee, so I could be at my best for my swimmers.

At precisely 8:28 AM Garrett walked into the cafeteria, followed by Peter ten to fifteen minutes later. Peter is not as time conscious as Garrett, however, he runs a fairly strict timeline for a person who seems to be able to go-with-the-flow. Both grabbed their breakfasts and sat down in the corner of the cafeteria where most of the USA athletes seemed to congregate as a place to call ours in the midst of this world-wide collection of cultures. As they joined my table, Peter placed his tray of French toast, some eggs and a bowl of fruit. After a trip back to the food lines, he returned with pancakes complaining that the French toast was not that good. Garrett, an oatmeal, granola and fruit eater, just smiled and placed another bite of banana in his mouth. The conversation was light and relaxed, ranging in topic from Garrett's wake-up swim to life back home. Both swimmers hailed originally from a northern state of the midwest. While Garrett went south for his collegiate career, Peter decided to stay closer to home and swam for his state's university. Already an accomplished NCAA swimmer, Peter continued his career as a mainstay on the national team and was now competing at his second Olympics. An Olympic gold medalist from four years ago, he is known by most in the swimming community as a great swimmer, one of our best, and a class act. As Garrett and Peter continued to reminisce about home and breakfasts, Ricky dropped off his tray of food, cracked a joke with a smile and sat down for a relaxing talk. It was not long before the final two members of my group would join us.

Aaron arrived first, a cup of coffee firmly in hand. For the past 12 years, Aaron has been a top-ten world ranked backstroker. He has a seven-year streak of consecutive victories in the 200 backstroke, during which he captured both the 100 and 200 backstroke titles at the last Olympics. A laid-back west coast beach lover, Aaron is as relaxed as a person can be. He is the last one to show up in the ready room before marching out to the blocks for the race, so much so that he was almost disqualified from a finals race in the last Olympics because he was so late. Luckily, the meet organizers could go to a commercial break for the network media and Aaron could swim and win a gold medal. He apologized to his competitors; he was truly sorry. It was a mistake. Normally, nothing seems to rattle him, except, today he looks a little bit more on edge. Aaron says hello but doesn't sit down right away. Then, he is off to get his eggs or oatmeal or potatoes; whatever he decides is healthy. Upon his return from the food lines, I noticed that he did not have as much on his plate as he had earlier in the meet. Something was going on. The easiness in his normal demeanor was missing. There was just enough difference to him that a coach that has been around him at top meets might notice that something was happening, but, hopefully, not so much that his competition might pick up on his nervousness.

In contrast, Ryan finally arrives with two egg McMuffins, a couple of hash browns, fruit, and a drink from the McDonald's, a little bounce to his step. Yep, I know, a McDonald's at the Olympic Village! For Ryan, this is a god-send because he thinks all the other food is odd. Unwilling to try something new, he sticks to something he knows. I can't blame him. Before arriving at the Village, USA Swimming warned the athletes not to use the tap water for any reason. Forgetting or not believing the threat of getting sick, Ryan brushed his teeth from the sink. This resulted in a fever and throwing up through the first day of competition. He swam the 400 individual medley as sick as a dog and still managed to earn a bronze medal. An easy-going,

laid-back, liable-to-do-anything type of person, Ryan's trademark long hair and bright warm-up suits hide the fierce racer that has already taken two bronze medals. If all goes right tonight, he could take home three more medals, all of which could be golden. That is, of course, if he can beat Aaron, who is swimming two of the same events.

Breakfast was laid back with sporadic conversations that were light in their tone and topics. Smiles and light laughter intermingled with a little gossip and a lot of stories. The USA swimming Olympic team is made up of newcomers and veterans, friends and strangers, year-round teammates and people they have never swum with before except to beat at Nationals. During training camp, through the swim practices, team outings, and team meetings, most everyone got to know one another and built a real sense of team membership. For close to a month now, the team had been assembled into small cliques, either predetermined by past national team trips or by new friendships budding. The six of us, my five swimmers and I, had become closer and seemed to sit together along with other friends within the swimming community assembled here. These others would sit for a spell and then leave as they needed to in order to get ready for their day. In all the conversations, swimming was rarely a subject discussed. I take that back, actually another swimmer, one who was not in our normal breakfast group, did stop by once to ask about today's events and how the boys were feeling. A quick, "this is going to be an incredible day," left Garrett's mouth, lip service in hopes of moving to another subject. When this athlete pressed for more, Garrett just stated that he did not feel like talking about it further. That was all. No emotion nor negative reaction. We never talked about swimming during breakfast until we were just about to leave and I needed to know their schedule for going to the pool. The swimmer said, "No problem," and went about his business. A small chuckle started with Ryan and then moved to others.

"What time are you getting to the bus station?" I asked, looking around the table as the bit of nervous laughter subsided. Ricky just smiled and threw another bite in his mouth. He was already thinking about the races to come, the excitement seen in his body language. He has a tendency to fixate and visualize on his race throughout the competition-day. One day at Olympic Trials I saw him alone, legs pointing towards the ceiling against the wall, eyes closed, thinking. After awaking from his catatonic state of ease, we struck up a conversation. It seems on the pool deck of a competition he uses that time to think through his race. Ricky said it kept him focused on the meet and what he needs to do. I mean, he talked with others, obviously because we were having a conversation, but would return to deep thinking shortly thereafter. Maybe it also helped with his nervousness before a big race. I know that he considered that a characteristic that held him back from earlier success because he could not control his emotions, his fears. Through a concerted effort to modify this behavior, he was more successful and had made this Olympic team as a member of the 800 freestyle relay. A relay only swimmer, top ten in the world, and yet third in the USA; one spot removed from an individual event at this meet. A plight that many of the world's best sitting in the bleachers, or at home, have endured. If all goes well, he will have a great swim this morning on the preliminary relay, made up of the four men who finished third through sixth in the 200 freestyle at Trials, from which the two with the fastest times will join the top two swimmers from Trials in the final this evening. All will get a medal, probably gold according to the times, but only four will swim at night and stand on the podium and hear the Star-Spangled Banner played for them.

Ricky swallowed. "My race isn't until the end of the day. I will probably leave about two hours before, probably 10:00 so I arrive an hour and a half to two hours before the race."

"Any idea how long the lines are going to be today?" Peter asked. Normally, we have an idea of what the buses might be like based on other days at the meets. It is never as accurate as one might hope. The buses from the Village to the different venues stop at a station situated close to our dorms. There could be twenty to hundreds of athletes, coaches and officials, dressed in all manners of colors, waiting to go to their places of competitions. At first this was frustrating for the newcomers. But as the days have gone by, the realization that one might have to arrive early and be patient has been assimilated into our daily routine.

I had my checklist of arrival times in my head. Most of the guys liked to arrive the same time as Ricky, about an hour and a half to two hours before the start of their race. The complexity of calculating their arrival time is that events would begin throughout the morning. In order to be ready for the arrivals, I would get to the competition pool early and watch for each to appear.

"Anyone care about warming-up in the competition pool this morning?" This was my question every morning. For each session, whether preliminary or finals, the swimmers could arrive early to warm-up in the competition pool. It would be open early and be closed thirty or so minutes before the start of the first race. Some believe they should swim in this pool or the exact lane of their race so they can visualize their swims. My swimmers were not as concerned and normally this would bring a chuckle or smile to their faces. They could warm-up in the separate 50 meter warm-up/warm-down pool adjacent, to but not seen from, the competition pool or spectator seating. Tonight would be a different story.

"I think I will," Aaron said. Ryan nodded in agreement. They had the first swims of the morning and so they would be at the venue early. I had anticipated this and said I would see them on deck in about and hour or so. The table disbanded for some downtime in the dorm. As

we walked away from the table, I bumped into Garrett, literally, almost dropping my tray. We both apologized. "Today's your day, Garrett," I said flatly. He nodded. On the first day of the meet, Garrett was riding on the bus to the competition pool. During the ride, he said he looked over at the Olympic torch for the first time. This is not unusual. Only Ricky and a handful of swimmers and coaches could attend the Opening Ceremonies because they needed to sleep and rest for the next day, or next few days, of competition. Only the lucky ones who swam in the latter days of the meet could afford to not go to bed until 2 AM following the more than 5 hours in which they attended the event. Garrett gazed at the torch and thought to himself, "it's golden." Of course it was, it was a flame, but in the morning light, it was eerily golden and bright. To him, Garrett saw a sign that he would be earning a gold medal before he left. He had earned a gold medal as a preliminary swimmer on the 400 medley relay, however, I believe he meant that he would stand on the podium with his medal listening to the Star Spangled Banner. Today was his last chance. It was the 400 freestyle relay and many prognosticators predicted a silver for the USA behind the French team. It was going to be close, but Garrett was sure we were going to win. "How can we have three guys under 47 seconds and not win?" That was a great question but, on the other side, the French had several men who held the world-record in the past year, seemingly tossing the mark back and forth for the past eight months. I was not so sure, but then again, my opinion didn't matter. I wasn't swimming.

We all returned to our rooms. The Olympic Village dorm rooms had little in the way of the comforts that one might expect for the caliber of the competition. Unlike a hotel room in the States that has a bed or two, a desk, television, bathroom, closet, and possibly an extra chair and side table, these rooms reminded me more of the dorm my freshman year. There were two beds, some end tables and a closet. That was all. Listening to music, joking with roommates, emailing

family or playing video games were activities of choice. Peter spent his down time on his bed surfing the web, answering emails and talking with his roommate. Some might take the time to think about races. Ricky would do this to some extent. Most of his time was spent relaxing, talking and listening to music but he would fit in some quiet time to visualize his race to come. But, for the rest of my men, it was time to relax, take a minute of calm before continuing the biggest meet of their athletic careers. The hour to an hour and a half was long. Bag packed and all items accounted for, each made their way to the bus terminal and then to the venue: the voluminous 25,000 seat natatorium that housed the competition pool, the warm-up/warm-down pool, the competition diving well, the practice diving towers, and all the organizational rooms and locker rooms needed to stage the nine-day competition.

They all arrived and spent their morning going through their normal routines. They warmed-up, hung out, competed, warmed-down and then went to lunch followed by some time resting. All of my swimmers advanced to the finals tonight, even Ricky, who had to qualify to be on the finals relay. By finishing third in the 200 freestyle at Olympic Trials, Ricky was a relay only swimmer on the team. He and the others who finished fourth through sixth would swim the preliminary 800 freestyle relay in the morning with the fastest swimmer in prelims earning a swim with three other swimmers who gave the USA the best chance to win. In other words, Peter and another swimmer as the individual representatives for the 200 freestyle along with Ryan, who was the third fastest 200 freestyle swimmer in the US but did not swim that event at Trials, were going to swim tonight and Ricky, being the fastest in prelims, earned his spot with an outstanding swim this morning. Our races were set. The excitement had been building all day long and now, two hours before the first finals swim, the bus station at the Olympic Village was packed with athletes, coaches, managers, and officials making their way

for the second time to the competition pool. I expected the same routine tonight as it was this morning and every other session thus far. Only time would tell if everything was going to run smoothly. It almost always did, but this was the Olympics in a foreign land. I was excited and cautious, nervous and ready. Let's just get to the pool and see who was the best in the world.

Finals

Finals would begin at 7 PM with the women's 800 freestyle. The first swim for the men would follow with the 100 backstroke at 7: 24 PM. Aaron would be swimming this event and the 200 backstroke along with Ryan. Both were standing next to me at the bus station. We were in line for the next bus, which would put us on deck a little more than one hour and forty-five minutes before their race. Various colors and languages filled our vision and ears with the wonder that is the Olympic experience. Many of the conventions of the Games had lost their luster, but not these two. I could see all shades of color in the clothes, skin tones and eyes of the participants. Excitement filled them as the speech they used, although not understood, betrayed this barrier of non-communication. We were all awaiting transfer, transition to the last night of the best swim meet in recent history, even Olympic history. We were participants. We were witnesses. I was filled with enthusiasm. Aaron and Ryan seemed filled with ... calm. As relaxed as if they were on the beach in Costa Rica, they and their other teammates talked about anything but swimming.

The next bus turned and drove up in front of the line. I quickly counted and knew that most of the USA team standing with me, including Aaron and Ryan, would be on this bus. The line had tripled in length since my arrival 20 minutes earlier. I could see Garrett about a third of the way back from our position. Peter was next to him. Ricky was not within view. I scanned again, no Ricky. Ricky was pretty conscious of his time and arriving early. I wasn't worried. I would see him on deck. All the guys were good with time. If something would happen, they would adapt. They gave themselves plenty of time. Four years earlier, a USA swimmer arrived to the pool, a thirty minute bus ride, and had forgotten his credentials. He was not allowed in the

venue. He turned around, went back to the village, retrieved his identification, and made it back to the pool with little time to warm-up. He did well, but the lesson was not lost on anyone. I could see everyone rechecking their picture i.d.'s and then boarding the bus. I got a window seat on the bus where I could see the queue. Ricky had just formed up at the back of the line. I hoped he would be okay, this was the type of thing to get someone nervous.

We took the 20 minute ride and arrived at the competition pool. This indoor natatorium was the largest I had ever seen. The host country had outdone themselves, sparing no cost. The USA contingency entered to the bright lights and sounds of splashing water, times being called out by coaches, and the chaos that was warm-ups in the competition pool. I stood for a second to take it all in. The architecture made one feel like they were in water, suspended in place, with bubbles and colors slowly moving around and through the walls. The team stepped past me and walked their own directions to the team area, locker room, bleachers or whatever place they felt they needed to go in order to start preparations for the meet. Ryan had his noise-reduction headphone engulfing his ears as he found some space in the team area, back toward the masseuses, to start stretching. Normally, this was 20 minutes of stretching he started doing when he got to college. He hadn't stretched before swimming previous to this, but now it was part of his routine. It was a bit of quiet for him. If someone walked by and wanted to talk, the headphones would come off and he would chat as long as the other person wanted. This was not ideal, but he always wanted to be available to others. He had been snubbed by Matt Biondi, a great American swimmer, at the age of 6. Matt denied giving him an autograph in the elevator because he was getting ready for a race. Ryan vowed that he would never do that and has always had time for anyone who wanted it since rising to the national team level.

My eyes rolled past Ryan and saw Aaron stretching by a masseuse's table. He was talking sporadically to people as they walked by. He will talk about almost anything. Earlier in the meet, we talked about his stretching routine.

"What are you thinking about when you are being stretched?" I asked him on the second day. Aaron was on the 400 medley relay that day and won the gold medal with that team. I knew it was a big day, but then again, what day wasn't during the Olympic Games. I was just curious.

"Honestly, I am just thinking about how my body is feeling and what I need to do to get it warmed-up in the water. Just easing into the day."

"Is that always part of the routine?"

"I don't have a routine, Matt. It's just what I need to do." There was a polite smile and the conversation moved onto another topic, one that was not swimming. Interestingly, most of my guys don't think they have a routine. And yet, they do the exact same thing every day, every session during this meet. It is predictable and yet they are so accustomed to the activities they choose to participate in, they don't see it as anything more than what is done during the day. It is not noticed by them. There is little thought involved ... it is automatic. It is actually funny, comical to me. They continually deny their having a routine and yet it is the exact point that they do the same things over and over again because those activities help them feel good and lead to success.

Now, again, on this final day, I see Aaron starting his stretches and he still looked a bit uptight. "How are you feeling?" I asked pointedly, no emotion in my voice.

"I didn't sleep well last night. I think that's making me a little jumpy."

"That's natural with lack of sleep." I replied dismissively. But I could still see that Aaron was working through his emotions. "You've been here before and been successful. You'll figure it out."

"I just keep telling myself to shut up and not listen to some of the thoughts rolling through my head." He smiled. "I always get a little nervous and I think that is a good thing. But, it's a little much today. I will just have to spend a little more time relaxing and being in the water ... it has always had a soothing effect for me." A small glance and I knew the conversation was over. There was nothing more to be said really.

"Just relax, Aaron, you will be fine." I stood there for a second or two in case the conversation needed closure on his part and then walked away. I would be keeping tabs on him tonight. I might let Kris, another coach from his training site, know. He will have a better feel for what to do. Eddie, the head coach, might be a little preoccupied and, from what I could gather, might add more stress because he gets as nervous for his swimmers' success as the athletes do on their own.

Peter walks by after taking a later bus. He will probably just relax for a little while before starting to get stretched by a masseuse because his swim is later in the competition. If a masseuse is available, he feels like it gives him a stretch and maybe a shake; this is where the masseuse "shakes" the different muscles to stimulate activity. Peter is a firm believer in having a professional stretch him, especially his hamstrings. He waves hello and sits down by a masseuse's table while one of the women swimmers is getting some work.

Garrett enters and heads to another part of the massage area and sets his bag on a bench. He doesn't normally stretch before warming-up. He will probably just relax for a few minutes and then head to the warm-up pool to get in for the first time this evening. He is in one of the

first events of the evening and so he will probably get in sooner than later. He is now in business mode and unlocks his bag to get a small snack and hydrate. He is one of two athletes that I have noticed have locks on their bags. When asked, Garrett explained that with all the doping testing and the pressure of the meet, he did not want to give anyone access to anything he ate, drank or even had in his bag or person without his permission. Since all athletes are responsible for what they put in their bodies, this allows him to feel as though he is protected from a purposeful or accidental tainting of his chemical results, which would cost him more than a medal ... it would be the next two years of competing or more. With every contingency planned for, Garrett starts his routine at the venue. He might be all business now, but he looks relaxed, focused, and ready to go.

All are present but Ricky, who should be arriving shortly, depending on the buses. Nothing to worry about yet. I walk over to some of the other coaches who are near the doors leading to the competition pool. There is talk of the upcoming events as well as some hiccups to the schedule that swimmers have encountered throughout this final day of the meet. I hear Kris saying, “As I always say, something is going to go wrong ... be prepared for it.” This might be the biggest theme to any meet experience. Ryan and I were talking about it one day.

“Worst case scenario, you arrive with 10 minutes before you swim, what would you do?”

“Win.” He give a little laugh. “I would warm-up for 5 minutes ... well, as long as I could and then go to the blocks.” He looked blankly at me with widened eyes, eyebrows raised, shoulders shrugged as if to say, “What else is there to do?” Point well taken. You do what you normally would do in the time you have to do it. In other words, the essence of the routine is stable and relatively low in time commitment. Much time is spent waiting, hanging out, and talking with others in comparison to the actual warming-up and competing. This is where the

athletes make room in their schedule to adapt to something unexpected or outside of what Peter affectionally calls his “comfort zone.” The athletes know what to expect, they have been at swim meets all their lives. When expectations are met, the athlete is comfortable. When they are disrupted or interrupted, Peter would say that he is outside is comfort zone, that place where expectations are met, and he needs to do something to deal with the problem and get back to a place of relaxation. So, if there is a blip on the screen of expectations, adjust. Get back to what you do. Seems simple and reminding the athletes that they will have to make some kind of adjustment, as Kris was saying, is a great idea.

Kris was finishing his talk when I heard, “It’s about time you showed up.” Aaron was teasing a slightly sweaty Ricky, who was still in his sweatsuit, bag draped over his shoulder, headphones around his neck. There was a slight panic in his eyes as his heartbeat was visibly pulsating in the carotid artery in his neck. He gave a smile; there was relief that he was here. He was too excited for this race and nothing was going to get him down tonight. Aaron was in his warm-up suit as was Ryan. The two simultaneously, but separately, were making their way to warm-up in the water. Ryan made a right-hand turn at the door towards the competition pool, while Aaron walked past the door and through a doorway in the plexiglass wall through which the warm-up pool was visible. Both had a towel with them and their goggles in hand. It was time to really get moving. The night session was in full swing.

I moved to the competition pool and the wonder that was the warm-up at a major swimming meet. International swimmers and coaches were spread across the deck, jumping in the water, swimming, talking, timing, and dodging others, respectively. Many spoke English, but the beautiful cacophony of languages mixed with the splashes of water that echoed throughout this seemingly symphonic hall. Spectators milled around the rows of bleacher seats,

holding signs with their countries colors and names, while juggling a snack or drink; they crawled along noticing the chaos of motion in the lowest, most central, focal point--the pool. It is always fun to watch warm-ups for nothing more than the fact that every "normal" convention of a nationally sanctioned meet is broken. People circle swim, swimming on either the right or left side of the lane in a circling pattern so that no one runs into each other, in both directions. So, the South Africans circle swim on the left while the Americans will swim on the right. This causes collisions and many frustrated yelling matches. Then add in that some like to do their pace work in lanes that are being occupied by many swimmers or diving off the blocks onto other people while they swim all because you must do what you need to in order to be ready, damn the rest. We already had cuts, scrapes and bruises from warm-ups. It was fend for yourself at all costs. It was like watching a car wreck ... you don't want to see the impact but you can't turn away either.

This was Ryan's chosen location for his warm-up. Wearing a bright white warm-up suit, a cap and goggles, he dove in and began his 1000 meter swim to start his 26 minutes of warm-up. For a self-proclaimed "laid-back-easy-going-Ryan-Lochte," he was quite precise in his calculation of time when it came to his actions at a meet. As he puts it, "It's 12 minutes to start stretching; 15 minutes of stretching if someone talks to him; 10 minutes to sit around, relax, change into his suit, get his things and go to the pool, 15 minutes to relax around the pool, then on with the cap and goggles and into the water for 26 minutes of swimming." I timed it once and he was right. It's pretty much the exact same thing in the morning or night sessions, with the difference depending on the distance that he has to swim in the competition that session. He will swim straight, then some drills and kicking, followed by some faster 25's and some pace. It's simple, straightforward and one part of his routine that has been with him since he had to make

up a warm-up his first year of college. His coach at the university told every swimmer to write down their warm-up. He had no idea what to do. So, he asked both his father, who was his club coach, and his university coach what to do. They both gave advice and he formed this regimen. It's worked so far with a couple of world-records to boot.

Garrett walks onto the competition pool deck. He has changed and walks to the far end of the pool. His head is down inspecting his goggle strap. Instinctively, he dodges the many passers-by without even looking up. He is in his element. While others are crazily calling and yelling, coaches leaning over the edge of the pool, people trying to pass each other on their way to where they need to be, Garrett could just as easily be walking in a city park, completely engrossed in the minute detail of a rock that has the markings of granite. His interest is in the moment, it just so happens that that moment is fixing the knot in his strap, not the immensity of this event in his career. He looks up, puts his towel down and gets in the pool.

Garrett might be my favorite person to watch warm-up. I can only describe it as passive aggressive in the purest sense of that label. Garrett swims his warm-up at the slowest pace possible without sinking. And he will not stop for any reason. For the next 700 to 1500 meters, he will continually swim slowly, holding up the lane, daring people to pass him. I watch frustrated people slow up behind him or take a few wildly fast strokes like a truck pressing the accelerator so that the engine revs and lets you know that the driver is unhappy with your decision to drive only 5 miles over the speed limit. Garrett seems unaware. There are two outcomes for him swimming slow. First, it feels good to him and keeps him relaxed. When he was fourteen years old, Garrett realized that the warm-ups were stressing him out. The chaos was too much and he would get frustrated. He had to find a way to warm-up and just "chill out" because he knew that as the meets grew in importance, so would the intensity of the craziness in

warm-ups. So, he swam slow, daring people to pass him. He got out of the pool, felt good, and continued to swim a slow warm-up ever since. Actually, as he puts it, his speed has "progressively gotten slower as I've gotten older." To me, it just seems like a car in the fast lane going two miles under the speed limit. The back-up, the frustration, and the slow car enjoying the view of the city. I can't help but chuckle a little bit. He will swim for a little while, scull, kick under water, drill some freestyle and build a few 25's. There is no specific lengths of each. This is not prescribed like Ryan. Honestly, only Ryan's warm-up has distances that are set for each element of the warm-up. Garrett, as do Ricky, Aaron and Peter, seem to use their awareness of how their body feels to make changes and adapt to what their body needs to be ready to swim. Yes, they all have elements that they prefer to include in their warm-up, although those differ swimmer to swimmer, but the degree to which those rudiments are used changes in each warm-up.

I leave Garrett and Ryan to return to the warm-up/warm-down pool. Aaron and I run into each other as I get back to the team area. He has dried off and is in the middle of a deck change, when a swimmer changes out of his/her swim suit on the deck with a towel wrapped around them. He has finished his warm-up and will be putting on some warm clothes until he changes into his competition suit. I paused and joking asked, "Do more than a 500 this time?"

"Barely ... no, I did a little more than that this time." He smiled. Aaron has a theory that the more tapered and rested a swimmer is the less they need to warm-up. "You only need to get down to the wall and back ... it's not like a 6000 meter workout or anything. How much do you really need to be warmed-up to go down and back?" he told me once. But, I knew that it was as much about getting his body ready and feeling good, so that he can swim his best, as it was that today he needed to feel the calming effect of the water.

"Feeling better than this morning?"

"A little bit." He still had some time. Aaron liked to be out of the water about an hour before his swim. That gives him 40 minutes to relax and change into his race suit before he would climb back in and then go to the ready room, the holding area before the swimmers walk to the blocks and swim their race. "Garrett already got in?"

I nodded. It hadn't occurred to me that it might be a little early. "Probably just wanted to get in the competition pool," I answered.

"No, it's about right I guess. His is the ..."

"Fourth event."

"Right."

"And you and Ryan are first."

Ryan nodded with a half-smile on his face. He knew that all too well.

"Matt," Ricky called out, "What time is my swim?"

"You and Peter are last ... 8:45 PM"

"Thanks." Peter turned around and headed back to sit down. Everyone was now settling down for the evening session. The swimmers on the team that were to swim tonight had arrived and found a spot to place their bags and find a seat. They were arranged by cliques, like any other team. Many of the athletes had been on national teams in the past or train together throughout the year. One such group are the Texas Boys. There were nine swimmers from the university team qualified for the Olympic team. The ones that were swimming tonight were gathered on one side of the team area. A few others sat near them, spreading out throughout our area. Unlike junior high children, these cliques did not exclude others. It seemed as though most would talk with one another if a conversation began. There were some contentious relationships,

but not to the extent that these became a problem. Those individuals would just avoid one another. There were enough people that one would find a person with whom they could hang out without much effort. Establishing these relationships early in the training camp is important, well, at least before getting to the Olympic Village for the Games. There are some unwritten rules about how to handle oneself when at an elite swim meet, if not every meet. These rules of decorum include giving another teammate their space to do what they need to do to get ready for their race. This could include talking with them if they are chatty or being quiet if they need some space. You just need to watch out and find the people that are similar to you and give space to those who are not.

Ricky was lying on his back against the wall with his legs going straight up in the air. He was relaxing, eyes closed, headphones on. He was resting his legs and using the music to calm down a bit. We talked about this a lot over the last three weeks. Ricky is different from the rest of the men I am trying to care for during this national team trip. We were talking about Olympic Trials and his journey to the Olympic Games. In order to make the trip, a swimmer must be either a top two finisher in an event at Olympic Trials or finish in the top six in the 100 freestyle or 200 freestyle because we need swimmers in the relays. If we take six, then we have four extra swimmers in case someone gets sick or to allow those who finish top two to not have to swim the preliminaries. Now, this might seem pretty reasonable to only take the top two because it means that the very best of each country would be represented at the Games. But consider that the USA has, in some events, the top three ranked swimmers in the world. So, potentially a swimmer who finishes third at our Olympic Trials could be at least be a finalist in the Olympic Games if not a bronze medalist, but will watch from the comfort of home. One of the major races for Ricky, the one that he and his coaches believed was his best shot to make the Olympic team, was the 200

freestyle. He would only need a top six finish in the finals. Ricky made the finals in lane six. In the simplest of terms, he only needed to finish ahead of lanes seven and eight, the two lanes he would have a great view of during the race. And yet, he was so nervous on the day of the finals that he asked his brother to come to his hotel room to hang out so that he could relax. When that was not working as well as he hoped, Ricky called the sport psychologist and made an appointment to meet at the venue to talk. This helped him calm down and for the first time in his life, he really saw that this tendency to get nervous was holding him back from being as successful as possible. He, of course, finished well, claiming third place and now, after a good preliminary relay swim, a spot on the finals relay.

This odyssey to this day, set him apart from the others. Ricky is the only one who is a relay-only swimmer. All the others had qualified in individual events. Peter qualified in the 200 freestyle and the 400 freestyle, Garrett in the 100 freestyle, Aaron in the 100 and 200 backstroke and Ryan in the 200 backstroke and the 200 and 400 individual medley. This was not lost on Ricky either. There is a rumor that he wanted to meet a certain female swimmer from another country, and yet he had not approached her because he felt as though as a relay-only swimmer and one with a medal, how was he going to talk with one of the best Olympic swimmers of all time. Also, Ricky is the only one who spends most of his downtime during the meet concentrating on his swim to come. He told me when talking about when he thinks about his race, “Probably the whole time. Whenever I’m at the pool it’s usually all about swimming. in between races, I’m still visualizing, still trying to figure things out. All day long, I mean, after I swim I think about what did I do wrong and what could I do better. I just keep on running through the race in my head.” All the other guys are completely the opposite. Peter and Garrett might think about their races a little throughout the day, but, for the most part, they and Ryan and

Aaron do not think about their races until they get to the ready room. They relax and avoid examining their races until approximately ten or fifteen minutes before the race. I'm not saying that this is the difference between the level of swimmer, but there seems to be a correlation between the amount that athletes thinks about their swims in their downtime and the level of success. Well, at least it's something different between their routines.

I could almost see Ricky's mind working through tonight's swim, visualizing it from start to finish. "It is amazing that the way I visualize it is actually how it feels," he told me as he explained when and where he liked to go through his swim in his mind. With his legs against the wall, that was a favorite place for him to work through his swim. While this might help him, considering the others who have had more success do not do this, maybe this could be a problem. I am not thinking that the visualizing is a cause for less success by any stretch of the imagination, but Ricky constantly thinking about his race until he gets to the ready room might be. It is mentally taxing. He seems exhausted at the end of meets where he has multiple events, like Trials. Here, at the Games, he only has two swims and seems very fresh mentally and physically. He will swim well tonight. If he stays by himself too much, I will talk with him and get him out of his seclusion and serious thoughts. Just another situation to monitor, but I will not bother him at this point.

The competition pool is going to close in twenty minutes and my swimmers are out of warm-ups. Those who have finished their warm-up swim have changed into dry clothes, including shoes, in order to keep their muscles warm and loose. Getting cold is avoided because warm muscles equal relaxed body, one that can react and swim the best race they can muster. Ryan is seated and talking with a few of the swimmers from the USA and athletes he trains with from around the world. They talk and joke around a bit. He talks as much as others will like to

talk with him. He will not listen to music while at the swimming venue, except for his stretching. Once he gets ready to swim, the headphones go into his bag and will not come out until he is ready to leave. Besides talking with swimmers, he might get up and talk with coaches or watch flat-screen televisions. At the Olympic Games, the deck is a cleared deck. This means that only the athletes that are swimming and the officials are allowed on the swimming deck during the races. All the coaches, staff and other swimmers must stay away. Flat-screen televisions will show the television coverage of the races. These screens are in team areas, the warm-up/warm-down pool, locker rooms, ready room, and even in the hallways. The sound is turned down, but you can see what is happening. Regardless of watching, talking or just hanging out, Ryan sits down. It is not a conscious decision, but neither are the other actions of his routine. If he has more than one event, he likes to stay seated to save his legs. But, as I look back over the meet, there was not really a day when he didn't have one swim, so he sits a lot.

Ryan is not the only one seated. All my athletes are seated. When on the trip to the site of the Games from our training camp, four hours away by air, this sitting down came up in a conversation with Aaron, Peter and Garrett.

Peter sits to stay relaxed. "I like to sit a lot while either talking or listening to music," he stated, "the rhythm of the music is similar to the rhythm that I swim at. But, for the most part, I sit by myself and stay focused ... not thinking about swimming, but keeping an eye on what is going on."

"Always seated?" I asked.

"Usually, just depends on how I feel. I like sitting to save energy. It might be off-putting to other people but if they see me sitting around they probably assume that I'm, you know,

wanting to be alone and I want to focus on my race without being talked to," Peter said with little gleam and smirk, as if he could control the situation a little.

"I like talking about something to anyone," Aaron spoke up. "I mean, I sit down and I talk with people ... it's nice," a little smile comes across his face, "especially if it's a cute girl," he jokes. Everyone chuckles.

"But, you're sitting while talking?"

"I can't stand for shit, I guess." Everyone laughed. "I just try to keep my legs relaxed, but, if I need to wake them up a little bit, then I will stand and maybe stretch, it just depends on what I need."

"Just do whatever will keep you relaxed and positive." Garrett chimes in with some advice, "That's what I do. Sometimes I joke around, talk with Eddie, talk on the phone, go to the bathroom or just think by myself. Everything I do is just what feels natural to me, it's what relaxes me."

"That's the key," Aaron adds, "If I sit it's to keep my legs fresh, if I talk it's to keep me mentally fresh. I mean, whatever keeps you happy and having fun, that's what you do. I'm pretty reserved on race day."

"Garrett, what do you think about?"

"Anything, boats ... I like boats ... or food, or the day, or a joke that someone just told me. Nothing in particular. I mean, we've been doing this for ten years or longer. I've tried everything in the book. If it doesn't relax me, I'll never do it again. If it does relax me, then I might do it again. It's trial and error and knowing what to do to be ready for my race." Garrett finishes and looks around at the others who are nodding and chuckling a little at the boat comment.

"It's not rocket science ..." Aaron adds.

"Yeah, I just spend a lot of time just sitting around talking to the staff, coaches, some of the other athletes that swim that day." Peter looks around at the others, "or listen to music."

"But what if something happens that keeps you from doing what you would like to do?" I interjected into the conversation. I watched them basically do what they described during Olympic Trials. During that time, they looked completely under control. But, that's not always going to happen.

"I've learned I can only control what I'm going to do. I train to do well on my worst day. I can adapt pretty well and I think that' a huge benefit for me. I'm pretty easygoing that way," Aaron answers, he's usually the first to chime in on any question.

"That's why I don't have a set routine and I try to keep it that way because things change and I don't want to be in a position where say something happens where I get pushed out of my routine ... I can make adjustments." Peter finishes and I get a bit confused.

"But what happens if you get stuck in traffic to the pool?"

"My routine revolves around how much time I have and how fast I get through it so being late to the pool, you know, I just can't speed everything up," he looks directly at me, trying to explain his thoughts precisely. "Well, to some degree, it's adjustable to what is going on. I would still warm-up, I might just have less time between warm-up and the race."

Aaron jumps in. "If I showed up late, I would get in and do what I could with the amount of time I have ... I would probably get in and swim until my race, that kind of thing, if I was that late. I mean, I would do the best warm-up in the amount of time I could and then race the best I could."

Peter nods. Garrett does too, then says, “I don’t think it throws your routine off, I think it changes the routine a little bit. I think the location to where you’re going is the same, the route that you’re going to take is a little bit different. You want to get back to your routine but it’s okay to take a few deep breaths and think about it, think about how it doesn’t really matter, you’ll be fine, and then get back to your normal routine and move on.”

“So, the routine is very much the same steps in the same order, but just a truncated timetable?”

“Yes.” Garrett looks at the others. They agree.

“It’s the confidence you have to have and you have earned through training hard and knowing that through your experience, you can handle anything,” Aaron states.

“You have to know what might happen and be flexible enough to make adjustments. This is why I get to the pool when I do. I have the time to adjust,” Peter interjects.

“Right, Peter, but that’s also why I don’t listen to music all the time. I don’t like to do things that you might rely on that could potentially go wrong. What happens if your iPod battery dies? You know, you don’t feel comfortable without the music. That’s not good. What if they don’t have good coffee or the food you need?” Garrett states flatly.

“I don’t know about the food, but if my battery dies, I just feel like an idiot and then do something else,” Peter says, speaking to the fact that he likes music.

“Right, between warm-ups and the ready room, do what you like and be ready to change to what happens. You normally have plenty of time. Sometimes I watch the meet, talk to people, stretch, eat a bar ...”

“Think about boats ...” Aaron lightens the mood and from there the topic changes from swimming to sailing. Thinking back, I just know that those guys like to have fun and not think

about swimming. Ryan, in a similar conversation, said that he would do anything but think about his swim to the point that he figures out his strategy of the race when he gets to the first turn during the race. Maybe a bit of an extreme example, but the point seems to be that the guys relax, stay comfortable in warm clothes and do whatever makes them happy and have fun. "If I wasn't having fun, I would quit," Ryan said once.

"And what is fun?" I asked.

"Being there with friends and swimming fast."

"Do you have to swim fast to have fun, Ryan?"

"No, but it helps!" The memory fades and I return my attention back to what is happening around me.

I scan the deck and sporadic talking, listening to music and a lot of sitting is happening around the deck. The competition is closed and Aaron gets up to change into his racing suit and head back to the warm-up/warm-down pool for his second warm-up. Aaron loves to get back in the water to relax, feel the water and simulate racing at practice. During practices, sometimes the set requires Aaron to get out of the water and get on the block. Then he races for time. Since he is getting out of the water and getting straight to the race, he likes to keep that pattern as much as possible because that of itself is comforting as well.

Ryan gets up. He has just finished his flush out massage. This is where the masseuse tries to get the lactic acid out of his body. He only gets massages during elite meets, saying that since the masseuse is there, why not use them. I am reminded of how different their pattern of behaviors can be. Unlike Aaron, when it is time to get ready for the 200 backstroke, there is no way he will be close to the warm-up/warm-down pool. Ryan hates getting wet before he races.

He likes to be completely dry when he gets to the blocks. They are different in their actions but the same staying to what keeps them relaxed and comfortable.

Aaron walks by. "Ready?"

"Will be," he answers and smiles. He is dressed and ready with all the things he needs to go straight from the warm-up/warm-down pool to the ready room. The nerves I had seen earlier seemed reduced. The excitement of the race to come was overtaking the nerves. "Nothing is going to change how ready I am. We'll see what happens." He gives a wink and then walks away. He walks relaxed, head up, confident. He is in lane 2, qualifying 5th for finals. Some procrastinators have written Aaron off as at the end of his career and have crowned a new Olympic champion. Little do they know that, as Aaron put it following this morning's semi-finals, "I slipped on the start," and still hasn't gone 100%. It must be nice to be able to not give everything you have in effort and still make finals at an Olympics. That is rare, special, and he knows it. Aaron is quite humble and, because of that, well liked in the swimming community.

I see some movement of Garrett who is sitting on a bench with his parka and hood up. He is watching everything else going on. You can see his eyes take in everything happening around him, including what his relay teammates are doing. Most are stretching and getting themselves ready. Garrett has already changed into his suit. It might be a little bit early, but no one will say anything. He was ready to change and he must have thought that was the right thing to do. Then something strange. A swimmer from the USA women's team stops by and says something. Garrett firmly and loudly starts talking with her.

"What the fuck? don't ever fucking question when I want to put on my fucking suit. Not on this day, not when I'm about to swim." You could see that she was sorry for saying something. She was probably trying to help but had broken etiquette, don't be negative or

question what a swimmer is doing on a day of competition. You never want to say anything negative around people at meets, or competition, or when people are trying to perform because that's the respect you show them and how you support them. Don't question whether or not someone puts on a suit too early. Maybe say something afterwards for the next competition, but not on that day. Honestly, it looked like she wasn't questioning Garrett's routine. She probably just said, off the cuff, "Hey, man, it looks like you have your suit on early." It would blow over for tonight. She walked away and a few minutes later, he looked fine, as did she.

The first event went off and I looked over to see Aaron walking towards the ready room. He always cuts getting in the room so close. Basically, I will not see him until the end of the session. All swimmers go through a very similar schedule for a finals race. As the race comes closer, a manager from the USA team will tell the swimmer to head towards the ready room. It is their job to make sure that the swimmer is wearing the right clothes, suit and has their credentials. They walk the swimmers towards the ready room, and get them checked. During this time, each swimmer's suit is checked to make sure that it is legal. Then there is ten to fifteen minutes of waiting in the ready room. There is a flat-screen television showing the races in the competition pool. Most swimmers will either be listening to music, thinking by themselves, or, in rare cases like Ryan, talking. The room is called up, and they line up to walk out to the blocks where they will strip down to their suits, placing their things in a basket for safe keeping, and have their name announced. There will be a whistle. The swimmers will get on the blocks and then the race will start. Normally, Aaron gets to the ready room with a minute or two to spare. It's just what he likes to do and makes him feel comfortable but it might be a little too close for the coaches' comfort.

I turned my attention back to the swimmers seated in the team area when the manager returned, looking a bit frazzled. “That was a close call,” I overheard her say. “I told Aaron to go to the ready room for fifteen minutes and he said, ‘I’ll get over there.’ Well, he got there and the officials had pulled his card and said that he was late and would not be able to swim. The USA delegation got involved and it seems he just made it. TV had to go to a commercial break, but he made it by the skin of his teeth.” I was shocked. Thank goodness he made it. Waiting to the last minute is normal for him; however, this was closer than he could have anticipated. I know that he was not doing this to get a mental edge or gamesmanship. This was a mistake, I’m sure. I hope it doesn’t affect the swim. I would have to wait and watch on the screen.

Ricky and Peter had just started to get ready to warm-up. It was about an hour before their swim. Garrett started to move to get his things gathered together and get back in the water for a second warm-up. It is really hard to call it a warm-up in the same sense that he warmed-up after his arrival at the pool for the finals session. He, like Aaron and Ricky, gets in to swim a little bit and maybe do a build up 25 or 50. It is less than 300 meters and then out and get warm again. The 400 freestyle relay members were gathering and about to head to the ready room. Everyone on our staff seemed quite sensitive to the movement of those four swimmers. This was going to be the relay of the meet. We had already won the 400 medley relay and would probably win the 800 freestyle relay by five seconds and set the world record. If we won this race, we would sweep the relays, which had not happened in more than three Olympic Summer Games.

I watched Garrett walk to the far side of the room with the other three swimmers following his short swim and then they went to the door to walk down the hallway to the ready room. I followed for a second and then the team stopped. The senior member of the team, one who had swum the last two Olympics in this event, earning two silver medals, started to talk. He

was going to be the anchor and now was taking that role literally as he gave an emotional talk. "You know I've kind of been on this relay a lot of years, this is a 400 freestyle and we're going to swim it like a 400 freestyle. You know when people go up there and swim individually, nothing good happens. We're going to swim a 400 free and were going to swim it together." I looked at the three other swimmers, and it was so surreal because it was… sometimes people say stuff at the exact right moment when the person being spoken to is in the exact right mental state, and they think what that person said was the most brilliant thing ever and they just buy into it, completely. And at that moment those guys, you know, every piece of their body and mind just bit into what he said and if you could read their minds, it would be, "Wow, that's the most amazing thing that anyone has ever said. That was brilliant." So, they just kind of huddled up and looked like they were ready to tear somebody's head off. Literally, the biggest swimmers in size on the male side of the swimming world would now try to fit into a small ready room and keep themselves under control as their testosterone would go through the roof. The sparring of words through the newspapers had already been written and delivered. It was about time to swim the race and see who would be the best in the world. But first, I looked up and saw that Aaron was being announced for the 100 backstroke.

I quickly walked back to the team area to watch the race. Aaron is a great finisher but he needed to get out quickly. The fast guy in the race was a swimmer from Great Britain in lane six. I am not sure that Aaron would be able to see him, but the second swimmer from the USA was near Aaron and he too would get out quickly in the race. The swimmers got into the water. "Take your mark," and then the start. Lane six was in the lead early with Aaron keeping close. He would need to pick it up a little going into the wall in order to get in position. The wall loomed and this was a strength for Aaron. Aaron hit the turn perfectly and the race was on.

With 25 meters to go, Aaron had closed the gap as the Englishman faded. At the wall, Aaron touched first and defended his Olympic gold medal. He was the best, again, with an Olympic record. Everyone cheered in the team area, especially with the self-proclaimed non-backstroker, the second American, finishing in third with an individual bronze medal. Following the race, the swimmers would leave to get their stuff from the baskets. Aaron would have to go through the media zone before hitting the warm-down pool. I watched Aaron talking to the press at Nationals until they did not have any more questions. Tonight would probably be different. He needed to get to the warm-down pool and get that lactic acid out of his body. He had another swim tonight, the 200 backstroke, and it would happen in less than 45 minutes. It was no more than five minutes and Aaron reached the pool and was in the water. The whole incident in the ready room seemed like a lifetime ago. He was a gold medalist once again. He would swim down and then get ready to receive his medal. Following that, he would do the victory lap around the pool so that everyone in the stands and in the press can snap a picture of the medalist. As I thought about this experience, I watched the women's 200 breaststroke medalist go through the same scenario on the screen of the competition pool. I wandered to the warm-up/warm-down pool and heard the calls from Peter. He had completed his warm-up and needed to swim a few pace 50's.

Peter did a very similar warm-up to the other guys except he did not do a lot of kicking to warm-up his legs. He might do some extra kicking in a drill, but for the most part, he did not kick nor use equipment like a pull buoy, paddles or a kick board. This was unique and the lack of this element in his warm-up obviously did not hold him back from swimming fast. Peter was waiting for me on the wall next to the starting blocks. We did four 50's at pace. A pace 50 is when the swimmer gets timed for one length while simulating the race pace. Peter was exactly

on his times and he looked great in the water. His body position was high and he was holding water well with his hands. Peter was going to fly tonight and I was more than confident he would win another gold medal on a USA relay. He was third in the 200 freestyle earlier in the meet, and that was the distance and stroke he would swim tonight.

Ricky appeared in the same lane as Peter and waited his turn to do pace. Unlike Peter, it was a known rule that Ricky would not get the time for his pace. If I provided that information, Ricky would use those 50's times to over-think how he felt, how he was going to swim, and what he was capable of doing in the race. He too looked great. He had definitely earned his spot and he would be in his first Olympic final. It was a huge night for Ricky and he looked as calm as I had seen him before an elite race. Part of that is the work he has been doing to calm his nerves and mind, part of that was the understanding that the relay should dominate the race. It's nice to know you should win by a landslide. But, of course, that was only because we had four great swimmers in the 200 freestyle events.

Ricky dried off and changed into dry clothes. Peter was already changed and sitting by his bag. Aaron was finished warming-down and was changing into the team sweats and getting ready to get his gold medal. It is wild to think that he was about to receive the highest honor in the sport and yet his mind is probably already switched his thoughts to the 200 backstroke. After a minute or two, he was off to stand on the medal podium and Ryan was changing into his suit for the race to come. Then the music played to invite the men's 400 freestyle relay out to the blocks. This was it. I watched as the last women's event's competitors exited off the deck and the men walked out. The first relay swimmers were instantly getting out of their warm-ups while the others milled around and stretched. Garrett does the same arm swings that he always does and would get on the block from the side when his turn to swim came up. They announced our

team and there were some muted cheers in the team room. I looked around and everything had stopped for this race. The desire to be back on top of the swimming world by winning all the relays was palpable. In another minute, the first swimmers stepped on the block. The race began. Our first swimmer had already earned multiple individual and relay gold medals, actually he was undefeated in this Olympic Games. He turned at the wall with the swimmer from France who was in the lane next to him. Garrett stepped up on the block as the first swimmer approached the 25 meter mark. He watched and as the swimmer touched the wall, breaking the American record, Garrett was off. We were in second place and something seemed wrong with the exchange. I looked over to the other coaches and there was a slight worried look on their faces. That was a very quick jump by Garrett but there was no indication by officials or the timing system, which would let us know if the jump was early due to sensors on the blocks and the touch pads in the water on the walls of the pool. We watched Garrett swim as he took over the lead. We received confirmation that the exchange was legal and now the third swimmer was getting ready to dive in. As Garrett touched, we were in first, but the last two French swimmers had both been world record holders during this calendar year. As the third leg of the relay approached the wall, we were half a body length behind and a superhuman effort would be needed to win. The anchor leg had been in this position before. Prior to walking to the ready room, he had given a short, passionate talk to his teammates. This was his chance against a swimmer who could dominate the rest of the race. They were off and our swimmer fell back just a little. But, he slid back into the wave of the French swimmer. He was riding the French swimmer's wave, which will help him save energy as he stayed within striking distance. As the second 50 started, the USA swimmer began to close the gap. It was not going to be enough until they passed the 25 meters-to-go mark in the center of the pool. Then the French swimmer started

to tighten up. He slowed down and our swimmer kept coming. At the wall, it was a photo finish, too close to call. All eyes went up to the scoreboard. At the top, by .07 of second, was the United States of America. The last leg had swum the fastest relay leg in history at a 46.5 seconds. Are you kidding me? This was the greatest race I had ever seen. Garrett and the other swimmers yelled with every muscle flexed as a rush of adrenaline coursed through their bodies. This would be the picture that would be on every front page of the sports section of every paper tomorrow morning. According to everyone but those four swimmers on the relay, we had done the impossible and won.

The celebration was on. Garrett would take his time. That was his last race of the Games and he did not need to warm-down to prepare for the next race. The team room was still going a little nuts and then quickly returned to what they were doing before the race. This would be a boost for all on the team. We were swimming well and anything was possible. I have to admit, I was completely wrong. We won. Following that amazing race, Aaron stood on the top of the podium and heard our national anthem. He took his victory lap and then would hit the water one last time before going to the ready room. Ryan had already gotten up and was gathering his things for the ready room. Aaron jumped in and then got out. He walked over and placed his medal in his bag. Then, he and Ryan were gathered together by the team manager and walked to the ready room. They were both quiet. I watched as the two best backstrokers in the world, both from the USA, walked together in another battle to see who would get gold. Aaron had done this several times, Ryan did not have an individual Olympic gold medal. Who would win? I didn't know.

Garrett showed up about three minutes later with the team to cheers and high-fives. They were Olympic champions once again and the sweep by the USA was all but complete. "That

was the most amazing race I have every seen," one USA female swimmer said to Garrett. They hugged and he said, "Thanks. I can't believe how great that felt." You could see the pride he felt for winning for his country. He glanced over to his teammates who were going through the same type of interactions with team members. I shook his hand and gave him a half-hug. We smiled and laughed a little, it was great to be here with this kind of athlete.

I took a deep breath and watched the monitor where no movement was seen on the flat-screen. It was a commercial break and then the men's 200 backstroke would begin. I walked over and grabbed a drink of water and a banana. I was getting tired just from the emotion of the races. I could understand how emotionally and mentally exhausted these athletes must get. Especially someone like Ricky who thought about his race over and over again throughout the day and session. After a short conversation with another coach extolling the amazing occurrences of the relay, I returned to the monitor and saw the men walking out for the 200 backstroke.

All the names were called and then the whistle sounded for them to jump into the water. Backstrokers begin in the water, hands on the blocks and feet just below the surface of the water. Aaron jumped in and then Ryan. Ryan was always last to jump in; it might have something to do with him not liking to get wet before the start of the race. The rest of the field got settled in their starting positions except Ryan who was still under the water. He finally emerged and quickly got set. The race began. Aaron and Ryan were off. Both looked great in the water. Aaron might not be getting out as fast as he might have liked, but he is also the best finisher in the world in backstroke. At the first wall, Ryan is a little bit ahead of Aaron but some guy in lane eight has the lead. The second of the four lengths looked the same, except lane eight is still moving farther ahead. This is either going to end bad for both our swimmers or that swimmer is

going out way too fast and will slow as the race continues. The race was now approaching the final turn and Ryan and Aaron had all but closed the gap on lane eight. The swimmers came off the wall with Aaron in first followed by Ryan, but Ryan was better at kicking underwater and moved half a body length in the lead. The final length was close and Aaron was gaining. They got to the final wall and Ryan had too much of lead for Aaron to make up. Ryan squinted at the scoreboard. It took a second to figure out what the board said and for it to register that he was the Olympic champion in a world record time. He celebrated and Aaron gave him a congratulations. For the first time in seven and a half years, Aaron had lost a 200 backstroke and was not the world record holder. You could see the disappointment. He was proud of his race, but he wanted to win.

They climbed out of the water and waved to the crowd. They were both exhausted, red with expense of energy and heat, breathing heavily. Aaron could stay in the media room this time because he was done with his races at this Olympic Games. Ryan was going to be on the 800 freestyle relay in a few minutes. So, once again, I went to the warm-up/warm-down pool and after two or three minutes, saw Ryan emerge. He jumped in the water and warmed-down. He didn't have a lot of time, maybe fifteen minutes tops, but long enough to swim what he needed to swim. Ryan had a special length that included short bursts of swimming followed by relaxing for 40 seconds between these segments. This type of recovery would flush out the lactic acid and allow him to recover in half the time. He completed his warm-down and then changed into a dry suit for the relay. I approached him with a high-five. He quickly said, "I forgot to tie my suit."

"What?" I was confused. What was he talking about?

"When I jumped in the water for the 200, I forgot to tie my suit. I jumped in. I totally forgot to tie my suit. I totally forgot. When I jump in I'm usually one of the last people to jump in so I jump in... so it kind of went down a little bit and it totally filled up with water. So I jump then it just goes 'Bloooooop.' I'm like, 'oh, shit.' So I was like, 'Great, I'm at the fucking Olympics in in one of my best events and I forget to tie my suit,... great." So I push the water out and hiked it up as high as I could because I really didn't have time to tie it and so I got up on the blocks and the starter said take your marks and I go in. As soon as I do then I could feel water rushing in. I just thought great. Every fly kick water was rushing through it. I was so pissed off." I was in complete shock. I had wondered why he did not get on the blocks as quickly as the others and now I knew.

"So you basically swam the final in a diaper?"

" Yeah, it is pretty much a diaper. And I touch the wall I looked over and the scoreboard said, 'Ryan Lochte, first, world record.' I pulled my head back and said thank you. Whoever was up there, you helped me out a lot." He gave a small laugh, one of relief, one of excitement, mixed together. And then he left for the ready room. Ricky and Peter had left ten minutes earlier. They were probably wondering when Ryan would arrive. The final event of the day awaited.

After the women finished another awards ceremony and photo opportunity, the walkout theme began to play and the final relay walked out to their blocks. The first swimmers immediately started to take off their garments, stopping only briefly for the announcement of their team. When it was the USA team's turn, all the swimmers held hands and lifted them in the air. All had stern, serious looks on their faces except Ricky who was smiling ear to ear. He was excited and showed it. We were going to do well. The final team was announced followed by

the whistle which beckoned the first leg of the relay to get on their block. We were leading off the same swimmer from the 400 freestyle relay and the Olympic champion in the 200 freestyle. Each swimmer would swim the 200 freestyle and it would be a great person for starting. In a moment, the swimmers were in the water. Ryan started to take off his clothes; he was the next swimming leg for our team. Ricky and Garrett did not move. They both moved and got ready with arm swings and small jumps. Then, Ryan climbed on the blocks and was off. He was in the lead by over a second from the efforts of the first swimmer, who had set another record. By the time Ryan was finished swimming, we were up by a large gap and, if we had two good swims, would win by a landslide. Ricky swam and went a little slower than his morning swim. It was not a problem outside of wanting to get faster. Peter jumped in the water for his leg and the race was all but over. In the last Olympics, Peter had been on the same relay and won by only .10 of a second. It was a nail-bitter. It was a great win. History would not repeat this year. We were dominating. We would win by over six seconds with a world-record. We would again be champions. The race ended and the men celebrated. They would not need to warm-down as they normally would if they had more swims in the meet. They could all take their time with the media, taking victory laps, and celebrating with friends and family.

I took a deep breath. It was all over. I was exhausted. Everyone could relax. The meet had been the most successful in medal winning in USA swimming history. High-fives, hugs and cheers filled the team room. It was time to take in all that had happened and realize how special this time was for everyone involved. We would have another week and a half to experience the rest of the Olympics. And then it was home. It would be a long way down from Mt. Olympus. It would be good to be back.