

# **A Mixed Method Assessment of the Psychological Effects of an Intensive Wrestling Camp for Adolescents**

## **Summary Report**

Daniel Gould, Scott Pierce, Ian Cowburn, & Andy Driska  
Institute for the Study of Youth Sports  
Michigan State University

Michigan State University



Institute For The Study Of  
Youth Sports

This project could not have been completed without the support and assistance of J Robinson, the administrative, coaching, and counseling staff at J Robinson Intensive Camps, and the adolescent wrestlers who participated in the study. We thank them for the support and willingness to contribute to the project.

# Contents

Youth development through sport: A research overview	p.2
Why the J Rob Camp?	p.2
What questions did we want to answer?	p.2
The camp program	p.3
How did we collect this information?	p.5
<i>Who participated in the study?</i>	p.5
<i>Data collection procedures</i>	p.5
<i>How was the data analyzed?</i>	p.5
What did we find?	p.6
<i>The psychological changes in the participants</i>	p.6
<i>The process of learning for the participants</i>	p.9
<i>The individual stories of participants</i>	p.11
<i>The camp teaching philosophy and curriculum</i>	p.17
Strengths and limitations	p.18
What does this all mean?	p.18
Practical recommendations	p.19
References	p.21

## Positive Youth Development Through Sport: A Research Overview

One of our primary research interests at the Institute for the Study of Youth Sport (ISYS) is to gain a greater understanding of how sport participation can foster psychological growth and development in young people. Many studies have found that sport can contribute to psychosocial development (e.g. initiative, teamwork, emotional control) in young people (e.g. Larson, Hansen & Montea, 2006; Gould & Carson, 2010, 2011). Some factors that influence this relationship include the coach-athlete relationship and the caring climate that is created. However, the influence of purposefully created challenging sport climates on psychological development has not been examined, and few studies have examined the process by which psychological development unfolds over time. Answering these two questions formed the scientific rationale for this study.

### Why The J Rob Intensive Wrestling Camp?

The J Robinson Intensive Camp was the focus of this research project for the following reasons:

1. The reputation of J Robinson as a successful wrestling coach with over 35 years of experience and the reputation of J Robinson Intensive Camps as a respected youth sport experience.
2. Sport camps have become a big business and little evaluation has been conducted on the success of these camps in meeting their goals and objectives.
3. The camp's duration, intensity and intentional focus on the development of psychological skills. In particular, the research team were interested in the camp assertion that "they (participants) will learn lessons that will change their lives, not only in wrestling, but in everything they do" (quote taken from the camp website).

### What Questions Did We Want To Answer?

The primary purpose of this project was to **evaluate the effectiveness of the wrestling camp in the adolescents, particularly its effects on psychological development.**

We therefore asked three main questions:

1. Does this camp create changes in psychological skills and attributes?
2. What is the process of long-term psychological development of participants at the camp?
3. What are the individual athlete differences in the camp experience, associated with psychological development?

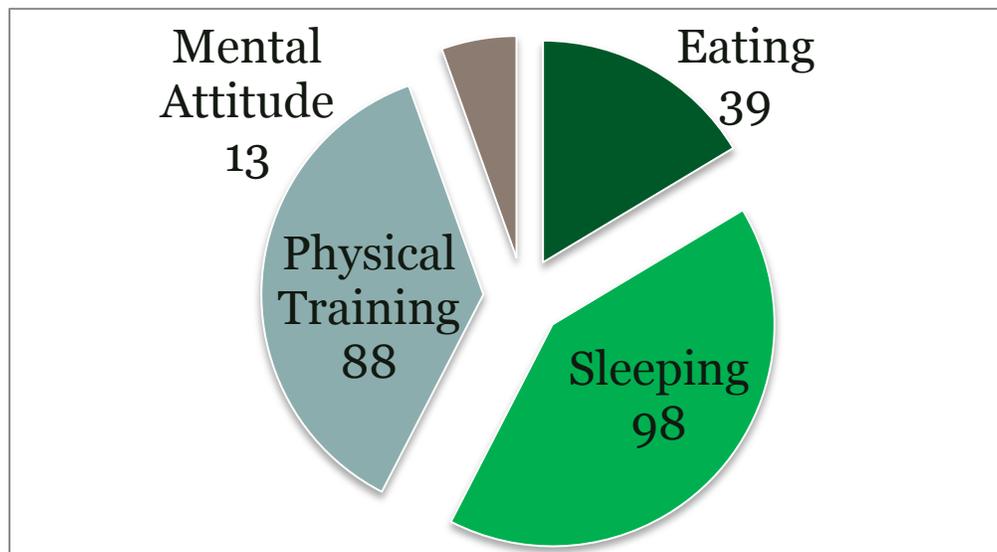
## The Camp Program

The J Robinson Intensive Wrestling camp is a highly successful privately run for-profit camp that has been in existence for over 35 years. There are two lengths of intensive camps: the 14 and 28 camp, as well as technique camps. All camps are held throughout the United States each summer with Coach Robinson being present and highly involved in all of them. This study focused on one 14-day camp.

Like all J Robinson Intensive Camps the format involved intense physical and wrestling training. The schedule for a typical day at camp is listed below.

6:30am	Wake Up
6:45-7:30am	Weights/Running
7:30-8:30am	Breakfast
9:45-11:45am	Technique Training
12:00-1:00pm	Lunch
2:45-4:45pm	Hard Training
5:00-6:00pm	Dinner
7:00-8:00pm	Mental Attitude
8:00-10:00pm	Weights/Running
11:00pm	Lights Out

An inspection of the figure below also depicts the total number of hours spent physical training, as contrasted to mental training, eating and sleeping.



In terms of the psychological development of the campers the program advertises that the wrestlers will develop in seven different ways. These goals include: (1) discipline; (2) sacrifice; (3) dedication; (4) hard work; (5) responsibility; (6) accountability; and, (7) service. These are often referred to as the J7. A variety of methods and strategies are used in the camp to teach the J7 and are listed below.

- Six Mental Attitude Nightly Presentations (e.g., Discipline) (approximately 40 minutes)
- 13 Post-Training Discussions Focused on Mental Attitude (ranged between 10 and 40 minutes)
- Reflective Journaling (Each camper receives a journal that contains exercises, short reading and journaling section that needs to be completed)
- Daily Relaxation/Imagery Sessions
- Practice “Positives”, “Neutrals”, and “Negatives” (Effort-based rewards given at the conclusion of each training session)
- Quote for the Day, Story of the Day, Thought of the Day (Focused on a new message each day)
- Group talk by two U.S. Navy Seals
- Physical Challenges Designed to Test the Physical and Psychological
- Coach/Counselor Feedback, Reinforcement and Discussion
- Points System for Graduation
  - Start with 1000 points
  - Lose points for failing to adhere to camp rules and daily obligations (e.g., bring water bottle to practice)
  - Need 700 points to graduate

The camp philosophy and curriculum has developed over the 35 years of the camp with Coach Robinson trying different approaches, keeping what works in the program and eliminating or modifying what does not. He has based the approach on his own experiences as a wrestler, his U.S. Army Ranger training, his coaching and life experiences, and from reading a number of books. He also said he was influenced by stress inoculation training research. The program is totally intentional in its approach and when interviewed, Coach Robinson had a rationale for all aspects of it.

Finally, it is important to note that while the emphasis in this report is on the psychological aspects of the camp, mental and physical development are not seen as two separate activities by Coach Robinson. They go hand-in-hand and work together to help provide an environment to facilitate psychological development.

## How Did We Collect This Information?

### Who was involved in the project?

The individuals who participated in the various components of the project included:

- J Robinson (camp founder and owner)
- 11 camp staff members (coaches/counselors/athletic trainers)
- 70 campers (ages 14-18)
- 7 parents of campers

### Data collection procedures

In order to answer the research questions for the project, information was collected in the following ways:

- Psychological Skills Questionnaire
  - o The questionnaire was completed by 70 campers at the beginning of the camp, at the conclusion of the camp, and at the conclusion of the camper's wrestling season.
- Camper Interviews
  - o Interviews took place with 7 campers at the beginning of the camp, throughout the camp, a week after the camp, and at the conclusion of each camper's wrestling season.
- Parent Interviews
  - o 7 parents (one from each camper interviewed) were interviewed at the conclusion of each camper's wrestling season.
- Staff Interviews
  - o The coaches, counselors and athletic trainers were interviewed during the camp.
- J Robinson Interviews
  - o J Robinson was interviewed before, during and after the camp.
- Researcher Observations
  - o Two researchers attended the 14 day camp and observed the camp operations and events and recorded field notes related to the events.

### How was the data analyzed?

A number of statistical analyses were conducted to understand the changes in psychological skills and attributes assessed with the questionnaires.

The interviews were audio-recorded and then transcribed. The researchers studied the transcripts and other data sources extensively (e.g., observations, camp records) and then used qualitative analysis methods to determine the common themes across participants and individual stories about psychological skill development.

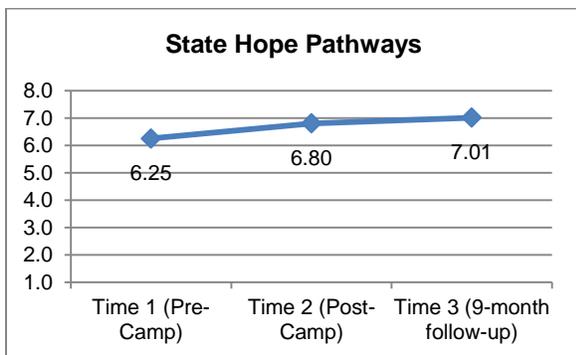
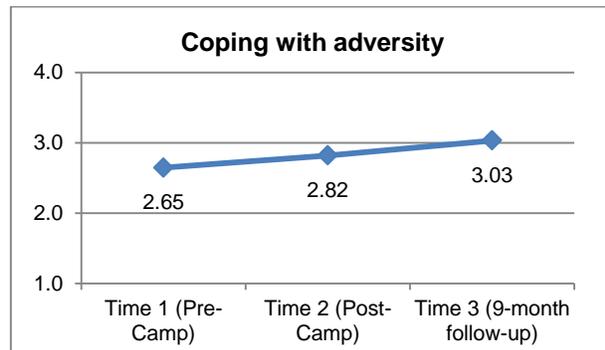
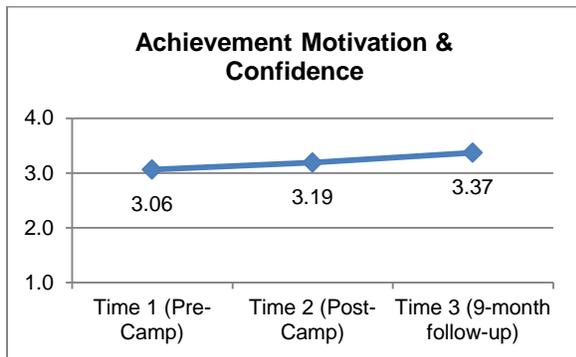
\*more information about analysis procedures available on request\*

# What Did We Find?

## Research Question 1: Does this Camp Create Changes in Psychological Skills and Attributes?

A number of psychological assessments were administered to campers who had permission from their parents to be involved in this research project and volunteered to complete surveys. The Time 1 assessment was taken at the start of camp (pre-camp), Time 2 at the end of camp (post-camp), and Time 3 at 9 months following the camp and after the high school wrestling season (9-month follow-up). The assessments included three existing psychometrically sound and validated instruments: (1) the Athletic Coping Skills Inventory (ACSI-28) [Smith, Schultz, Smoll, & Ptacek, 1995], (2) the State Hope Scale (SHS) [Snyder et al., 1996, and (3) the Trait Sport Confidence Inventory (TSCI) [Vealey, 1986]. The Time-3 survey also contained 44 items related to mechanism of the camp. These items were empirically derived based on open-ended camper responses to the Time-2 survey, as well as the systematic observations of the two investigators embedded at the 14-day camp.

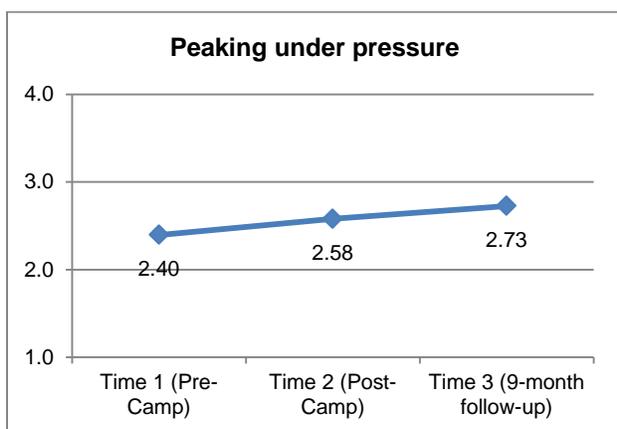
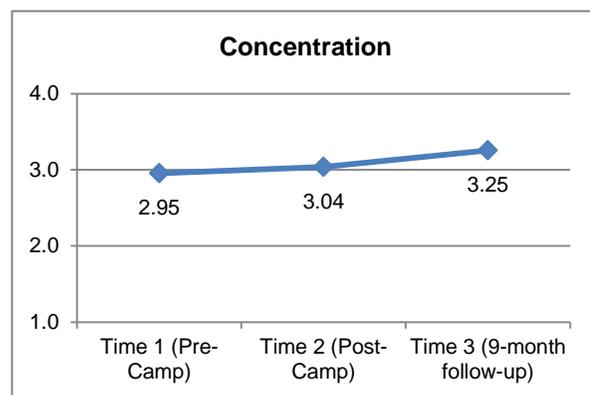
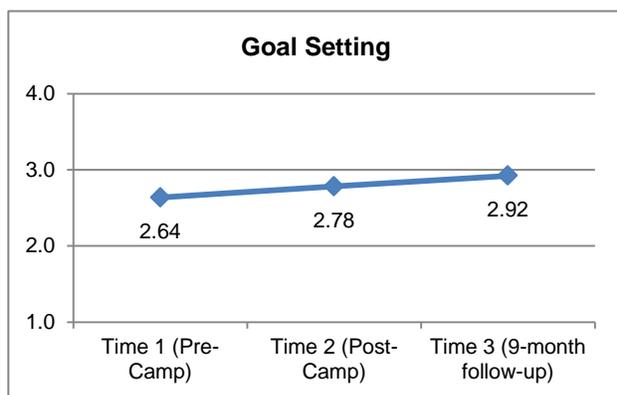
Results from these assessments are reported below.



These variables had significant increases pre-camp to post-camp, and continued significant increases at the 9-month follow-up. This suggests that the camp creates an immediate and lasting increase when it comes to these variables. It should be noted that many of the themes that are emphasized directly by the camp are measured by these variables, which we believe explains both the immediate increase as well as the continued increase over 9 months.

### Example survey questions

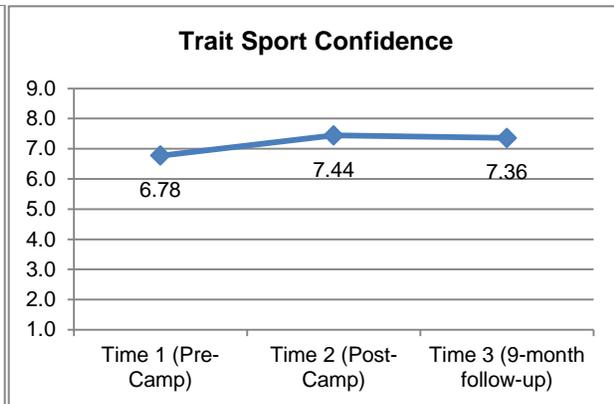
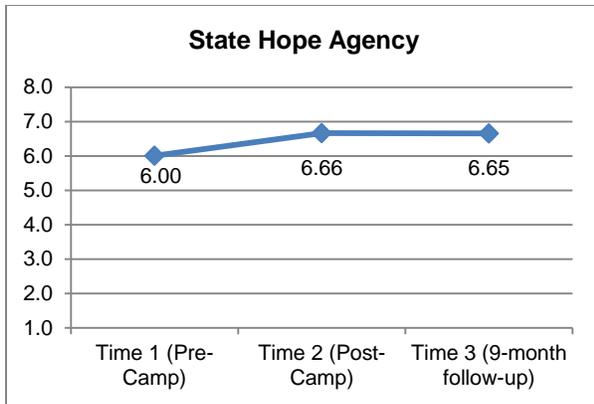
- **Achievement motivation & confidence** - I don't have to be pushed to practice or play hard; I give 100%.
- **Coping with adversity** - I maintain emotional control no matter how things are going for me.
- **State Hope Pathways** – There are lots of ways around any problem that I am facing now.



These variables increased pre-camp to post-camp, but the increases were not statistically significant (meaning that the changes were not consistent enough across all wrestlers to demonstrate that the camp caused a short-term change). HOWEVER, these variables did increase significantly between the start of the camp and the 9-month follow-up, which would suggest that the camp created changes, but that the changes took longer to emerge. It is unlikely that these variables would have increased on their own over the course of 9-months.

**Example survey questions**

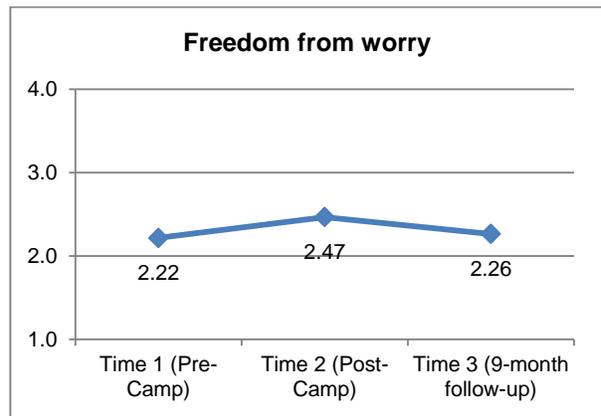
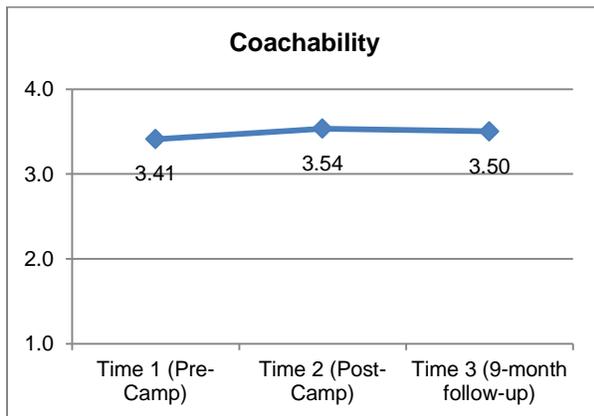
- **Goal setting** – I set my own performance goals for each practice.
- **Concentration** – When I am playing sports, I can focus my attention and block out distractions.
- **Peaking under pressure** – I tend to play better under pressure because I think more clearly.



These variables increased significantly between the start of camp and the end of camp. There was no significant increase at the 9-month follow-up. However, the effect was lasting (meaning that any decrease from Time-2 to Time-3 was not significant).

#### Example survey questions

- **State Hope Agency** – At the present time, I am energetically pursuing my goals.
- **Trait sport confidence** – Compare your confidence in your ability to *execute the skills necessary to be successful* to the most confident athlete you know.



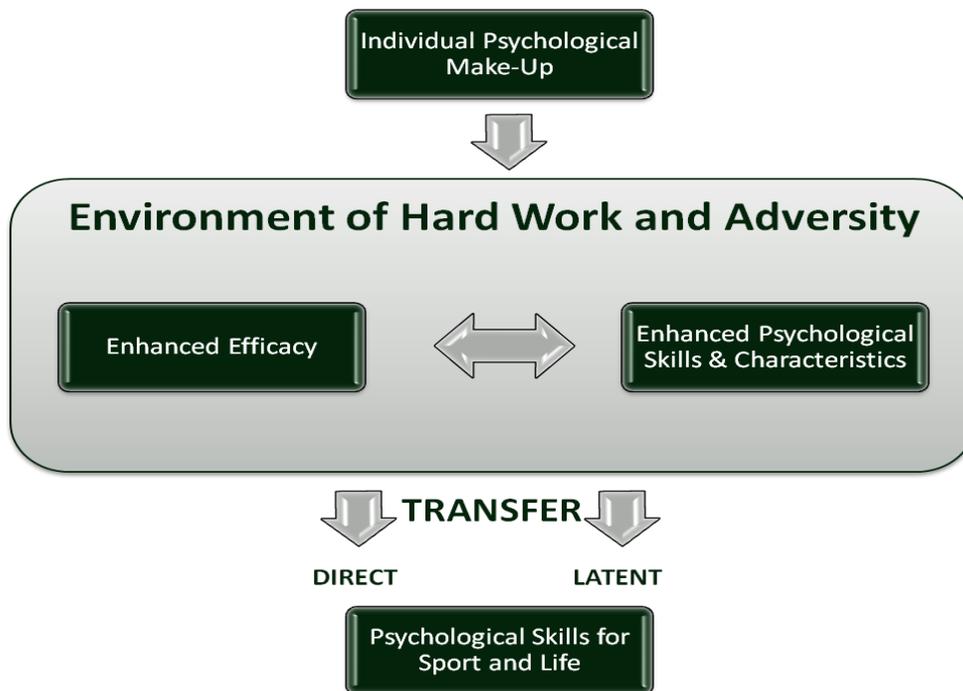
These variables showed no significant changes. However, these two variables are thought to be unstable, meaning that they can change considerably from one situation to another. For instance, “coachability” depends highly on the coach-athlete relationship, and as such, can vary considerably depending on what coach the athlete has pictured as he is completing this survey. Freedom from worry often does not change in a similar pattern when compared to the other variables in this study – it might be more dependent on deeper personality traits.

#### Example survey questions

- **Coachability** – If a coach criticizes or yells at me, I correct the mistake without getting upset about it.
- **Freedom from worry** – While competing, I worry about making mistakes or failing to come through. (reverse-coded item)

## Research Question 2: What is the Process of Long-term Psychological Development of Participants at the Camp?

Based on the interviews with the young wrestlers, their parents, the coaches, the camp founder and the observations of the two on-sight investigators, a model was formulated for the purpose of representing the process by which long-term psychological development took place. This model follows.



**Individual Psychological Make-Up:** each individual entered the camp with their own individual traits and attributes, including: willingness to learn, “readiness” for physical and psychological challenge, intelligence, mental skill-set, prior sport and life experience, talent or innate skill, support from family or significant adults, a prior knowledge of camp. These existing attributes influenced how the camp was experienced and it’s effects on the young wrestlers.

**Environment of Hard Work & Adversity:** the campers entered an environment that they reported to be challenging, stressful and one that required hard work. This environment was critical in bringing about change in the young athlete as highlighted by a quote from one camper:

*“You can’t describe how tough it is but it’s like you have this level of hard work and then once you go to J Rob you realize how much harder that level can be...you think you’re tough and then you go J Rob and you realize you’re not as tough as you thought you were”*

**The Relationship between Efficacy and Psychological Skills:** a reciprocal relationship emerged between self-belief and the development of psychological skills. Results revealed that the camp experience gave the campers a greater belief in themselves as wrestlers and people which helped them develop specific

psychological skills. At the same time, the understanding that they were developing these psychological skills gave the campers a greater belief in themselves as wrestlers and people.

**Enhanced Psychological Skills & Characteristics:** the athletes identified a number of psychological attributes that they felt were developed through the camp experience. As can be seen in the figure below these can be classified into four general categories: work ethic; personal empowerment; enhanced self-awareness; and, interpersonal skills.

Work Ethic	Personal Empowerment	Enhanced Self-Awareness	Interpersonal Skills
Hard Work	<b>Psychological Skills</b>	<b>Understanding of Self</b>	Leadership
Determination	Goal Setting	Self-Awareness	Service/Altruism
Perseverance	Visualization	Self-Reflection	Care for Others
Dedication	Organization/Time Management	<b>Understanding of the Experience</b>	Empathy
Sacrifice	Relaxation	Sport for Life Skills	Respect
Aggression	Prioritization	Enhanced Worldview	Effective Communication
Discipline	<b>Empowering Mindset</b>	Flexibility	Friendships
Focus/Concentration	Responsibility	Critical Thinking	
	Accountability	<b>Motivational Orientations</b>	
	Internal Locus of Control	Openness to Learning	
	Choices	Optimistic/Positive	
	Independence	Task Focused	
		Outcome Focused	

**Transferring Psychological Skills:** Following the camp experience, the campers identified different ways that they used the skills learned in camp. Across the campers, the skills and attributes were used in both in wrestling and in other areas of life (e.g. school, personal relationships).

**Direct Transfer:** Some skills were identified early and used immediately by the campers following the camp. For example, one camper was calmer in wrestling matches:

*“going in to my matches, last year I would just get so anxious and so nervous and this year I kinda found ways that would calm me down and I’d go out there and I’d just wrestle...so J Rob definitely helped me in the aspect of staying calm and cool”*

**Latent Transfer:** some skills were not identified immediately and campers took some time to realize that they had developed the skills. Here, one camper talks about his time management:

*“my grades improved this year too, quite a bit and ah I just ah know that, like the time management part of the camp, it’s something you don’t really realize until afterwards and ah it just sort of taught me to manage when I can do my homework and when I can train for wrestling and that’s useful too”*

### **Research Question 3: What are the Individual Differences in the Camp Experience, Associated with Psychological Development?**

Each of the seven athletes interviewed and followed throughout the project showed enhanced psychological development as a result of their intensive camp experience. However, their degree of change varied. They also had a different learning experience and that was influenced by his or her context and background. Each participant's story is summarized below and is labeled with a summary phrase that highlights a key element of the experience.

#### **Athlete 1: "Make the Plan, Work the Plan"**

This athlete was an intelligent young man who went into the camp with some wrestling specific goals to learn and develop as a technical wrestler and be able to share these ideas with his teammates when he returned home. Throughout the camp, a new definition of hard work and goal setting were skills that he continually referred to and were seen to develop. He would systematically reflect on the structure of the camp and take time to see how the different aspects of the camp worked together to help him develop these skills. He appeared to benefit from the direct teaching and experiential learning of skills through the camp, making specific connections between the role of the camp director, the structure of the camp, the skills he gained, and how he could use them in life. He left the camp as a more confident wrestler and went home to share his leadership skills and the new meaning of hard work. Following the camp, he continued to reflect on the skills of hard work and goal setting and was clear in how he developed and transferred these skills. He was also able to identify that he had learned time management skills that were really useful for him in and out of wrestling. In the last month of his wrestling season he was sidelined by a serious injury. Although he did not want to go into great detail about the injury, his mother made reference to the positive influence of the camp on helping him deal with the injury.

Athlete 1, then, went into the camp with wrestling specific goals and achieved those goals. To his surprise at the camp, he realized the value of psychological skills for wrestling and life, and then after the camp, he was able to take these skills of hard work, goal setting, and time management and effectively use them as life skills. He appeared to have a detailed understanding of the process of developing these skills as life skills. Athlete 1 would think in great detail about how he learned each skill and how he could specifically use each skill, before he would claim it as a life skill that he had learned and developed.

Overall, Athlete 1 was seen to develop the skills of hard work, goal setting, time management, leadership and a greater sense of confidence from the camp. His openness to learning from the camp and ability to reflect on his psychological development during and after the camp helped him maximize the psychological benefits in wrestling and life.

#### **Athlete 2: "Paving His Own Path"**

Through observations and early interactions, Athlete 2 initially came across as an individual who was primarily interested in just getting through the camp. While he understood the potential benefits of the

camp for his wrestling and life, he did not appear to be overly focused on realizing this potential. However, as the camp progressed and one of the investigator's built a relationship with him post-camp, the athlete opened up and was able to identify a number of ways in which he learned the skills of hard work, independence, responsibility and self-worth. These were skills that he felt helped him in his wrestling, school and relationships. He was an individual who didn't like to do any more than he had to but when he was prompted (by director, coaches, father), he was able to connect the dots really well and show the many benefits he got from the camp experience. As a result of the camp experience and reflections throughout the season, Athlete 2 appeared to change the way that he viewed and approached achievement. Initially, he talked about how he was sent to the camp as punishment from his father, and thus appeared to be participating for extrinsic reasons and focused on the controlling aspect of his father's actions. However at the camp, he started to consolidate more internal reasons for achieving success at the camp and became focused on the informational aspects of gaining independence, a stronger work ethic and the ability to create his own pathway in wrestling and in life.

The interviews throughout the camp, and post-camp were beneficial as a reflective experience for this athlete. And, if he is to maintain these benefits from the camp, he will need to continually reflect and be prompted to reflect on the skills that he has learned. Once he was able to break through the superficial focus on being a fun-loving teenager, it was evident that the camp served as a critical moment, alongside natural psycho-social maturation, that helped him become a more independent and self-determined individual.

At the beginning of the camp, this athlete appeared to lack motivation and was not overly interested in the psycho-social development. However, the investigators learned that "you can't judge a book by its cover", and he proved to be much deeper, psychologically, than was first thought.

Overall, Athlete 2 was seen to develop the skills of hard work, independence, personal responsibility, and gained a higher perception of his self-worth from the camp. Although he did not appear to internalize the camp messages immediately during the camp, his openness to learning from the camp helped him post-camp as he began to understand and utilize the skills he learned from the camp.

### **Athlete 3: "Confidence through Comparison"**

This athlete was a very polite and friendly young man who showed a great deal of respect to the interviewer as a researcher. He articulated his thoughts very well and on the odd occasion he appeared to be providing some socially desirable answers. However, upon probing these were all well explained with good supporting examples and were not socially desirable responses. Athlete 3 appeared to be an intelligent young man. He was able to pick up the purpose and philosophy of the camp very quickly and work out what he needed to do to achieve his goals and succeed at the camp, and in his wrestling season. His major focus throughout the camp appeared to be on social presentation, where he regularly discussed the importance of looking good in front of the coaches and counselors, and social comparison, where he gained confidence and belief in himself by comparing himself to other wrestlers and basing this confidence on whether or not he outperformed others. He had clear goals with the reward system

of the camp and gauged his success and psychological development on his achieving his goals of getting positives, outperforming others, and looking good in front of the coaches. This athlete appeared to be focused on the informational aspect of these rewards at the camp. This was evident whenever he received a 'positive' (he received more positives than negatives during the camp). Athlete 3 emphasized this feedback from the coaches as being very important for him, as an indicator of his success at the camp. This really helped him become a more focused, calm, and confident wrestler. He was able to identify the links between the camp messages and skills he could use in other areas of his life, but this was an obvious secondary focus for the athlete. He got exactly what he wanted from the camp, he became a more confident and hard working wrestler and talked about being able to perform better under pressure. He made clear connections between the stories from the camp director, journal and structure of the camp to his wrestling season and showed that he learned the meaning of these messages.

Overall, Athlete 3 was seen to develop the skills of hard work, goal setting, dealing with pressure and he gained a greater sense of confidence in his wrestling. His enthusiasm for developing as a wrestler allowed him to gain and utilize the many high performance skills from camp. However, his lack of reflection during and after camp on the potential value of these skills as life skills meant that the full utility of the skills has not yet been recognized by the athlete.

#### **Athlete 4: "The Workhorse"**

This athlete was a high school junior heading in to camp as a first time attendee, and had been wrestling for a number of years. He was an incredibly polite young man, with impeccable respect for his elders. This athlete's approach to camp was to cope with the physical aspects of camp (especially as he injured his knee at camp), not worry too much about reflection at the time, take as many notes as possible in his notebook (additionally to a camp journal) and then reflect on what happened once the camp was over. The politeness, desire to get through camp with the minimum of fuss made him challenging to interview at camp, but his reflections and memories went a lot deeper after camp, showing someone who had learned a great deal.

In his high-school wrestling season after the camp this suffered from viral meningitis, severe influenza, and a torn abdomen wall. Each of these, particularly the illness, acted as critical incidents from which he was able to apply lessons from camp, get support from important social networks around him (family, coaches, teachers), and grow from a difficult situation to achieve close to his season goals of wrestling for the state championship, and going on to wrestle at the Division One NCAA level the next year. Personal growth from this difficult time is a big theme for this young man, and his outlook on life was influenced by what he learned at camp, and what he learned about himself and other people while he was sick.

The relationship that Athlete 4 had with illness and injury then presents a darker side to sport than is usually given, clearly having suffered a number of injuries across his career and a good number during the season just passed. He has experienced a greater amount of adversity than one would consider

average for his age, and thus his approach to it is much closer to martyrdom than anxiety about, or avoidance of injury.

While the title for this athlete is “work horse”, that is not to say he is all effort and no talent. In fact, having recently signed to wrestle at the Division One college level, he is clearly a very talented wrestler. However, his “keep my head down and keep working” attitude is an important part of him maximizing his talent.

Overall, Athlete 4 was seen to develop the skills of coping with adversity, goal setting, organization, leadership, focus and hard work. While the athlete did not reflect on his learning during the camp, experiencing an illness during his wrestling season allowed him to utilize and understand the value of the skills gained in helping him through the challenge, thus helping to maximize the benefit of the camp.

#### **Athlete 5: “The Introspectionist”**

He had just finished his sophomore year when he attended the intensive wrestling camp and the post-season interview occurred during his junior year. He arrived at camp seeking greater physical and mental skills for wrestling, but ended up leaving with increased independence and appraisals of responsibility, viewing the camp experience as something more than just a wrestling camp, but as a pre-college experience. It is appropriate to say that he came in to the camp already seeking greater independence, having worked for his mother to earn money to pay for camp, but attendance at the camp appears to have accelerated this. The athlete talked on several occasions at camp about needing to be responsible for himself, that no-one else would be, and that he needed to be accountable for his actions. After camp he was taking greater responsibility of getting himself to practices and buying the equipment he needed for wrestling, instead of waiting for adults to do these things for him.

An inquisitive, reflective and learning based mindset entering camp is an attribute that allowed him to be successful at camp, but was also accelerated as a skill over the course of camp. Athlete 8 always asked questions of the investigators and took time to answer both the questionnaires and the interview questions after thinking about his answers very carefully. Whenever he was sat out at practices he would pay close attention to what the counselors were teaching and how other campers were learning. He discussed wanting as much information as possible from everyone at camp and used nightly walks to reflect on what he had learnt during the day. Finally, he identified being open and reflective as important skills required for camp success.

A greater positive mental attitude, which is comprised of commitment and generalized confidence was one of the biggest mental skills that he reported at the end of the season. This was particularly evident in his pre-match thinking, believing he could now go six minutes hard against anyone. It is also worth mentioning that the athlete was and is a strong-willed individual and even a trip to hospital during the wrestling camp with an asthma attack could not push him off course from achieving what he wanted out of the intensive wrestling camp.

In summary, the athlete came in to camp with a good number of the puzzle pieces in his possession. Over the course of camp he acquired new ones, but more importantly he learnt how to put the pieces together into the beginnings of a coherent puzzle. This more coherent puzzle then allowed the acceleration of learning over the course of the following season.

Overall, Athlete 5 was seen to develop the skills of independence, accountability, responsibility, organization, discipline, and gained a greater sense of confidence and self-awareness. His openness to learning from the camp and ability to reflect on his psychological development during and after the camp appeared to be extremely beneficial for him in recognizing the many benefits of the camp to all aspects of his life.

### **Athlete 6: “The Skeptic”**

This athlete was a junior heading into his senior year when he attended the intensive wrestling camp for the first time. A highly intelligent young man, he struggled with confidence early in the camp, but this improved steadily as he progressed through camp and the across the following season. The wrestling camp may have been his first with regard to the intensive nature, but was not his first life skills based camp experience. He has also attended scout camp, a conclusion based on the fact he is an experienced Eagle Scout and had leadership roles within the scouting organization.

As someone with leadership experience and other strong role models he was reluctant to immediately buy-in to the concepts of the camp without further explanation or understanding. This is not to say he was not open to learning, as he definitely came in to camp wanting to learn things. However, he was mature and experienced enough to want a little more freedom in deciding what he needed to do, or perhaps the stories of the camp director did not resonate as much with him. However, the experiential learning of camp, alongside the messages regarding stress inoculation made sense to him over time and he was more bought-in to believing in the principles of the camp.

Over the course of the camp Athlete 5 was able to cast a critical and realistic eye on where he felt he could be most successful, allowing him to be more measured with effort in specific sessions. That is not to say he did not put forth effort in every session, but he talked about putting more effort in to those tasks he knew he could get a positive in, and then aiming for a neutral elsewhere. While this more measured effort input is probably against the philosophy of the camp director, prioritization of critical and important events is a useful life-skill that will be advantageous to him as he enters University.

The main psychological skills that he appeared to get out of camp included being resilient through adversity, personal commitment, and “aggression” which for this athlete is probably analogous to confidence. Each of these were useful as he encountered a curtailed season due to violating a school-policy for attending a party where alcohol was present (the athlete did not drink and left the party when alcohol arrived, but returned to get his wrestling teammates because he was captain and was later penalized for violating team policy). The athlete stuck to his goals and worked harder in practice so he would be ready when his exclusion period was over and made it to the state championship meet.

Overall, Athlete 6 was seen to develop the skills of hard work, coping with adversity, and a greater sense of confidence. The athlete did not reflect on the utility of the camp messages during the camp but he gained the confidence and work ethic that he hoped for. Through some challenging experiences in his wrestling season, he began to understand the value of some of the camp messages as skills for life.

### **Athlete 7: “The Maturing Novice”**

This athlete was a freshman attending the camp for the first time, and came in with the goal of improving physical endurance and learning new moves. Learning physical skills was how he measured success at camp and although he did not graduate the camp, felt he was successful based on his own criteria. It is difficult to suggest that perhaps he “failed” the camp just because he did not graduate, especially as he achieved what he set out to achieve upon entering the camp. However, the fact he signed up for the same camp this year demonstrates he feels there is more to learn and perhaps unfinished business with regard to graduating.

The athlete acted in a way that the researchers perceived as young for his age. He was very much interested in joking around with other campers and counselors, to the point where he one struggle to stay focused on an interview because he wanted to show off to other campers sitting nearby. He also tried to de-formalize interactions with coaches, sometimes trying to joke around with counselors at inappropriate times, which clashed directly with at least one senior, authoritarian coach. This may be related to his age and be part of a learning process of how to talk to, and interact with adults.

Throughout our interviews it appeared as if the athlete was giving the first answer that came into his head, or an answer that he perceived as socially desirable. This led to him contradicting himself several times during interviews. It was difficult to tell if this was a social presentation strategy that allowed for some ego protection, or if he just wasn’t reflecting much on his camp experience at all. He quite often used self-serving attribution biases, such as failing to acknowledge that the reason he did not graduate the camp was not down to his own effort, but due to time out due to injury and hydration. However incorrect these attributions may have been, they did allow for him to have continued optimism in a stressful situation.

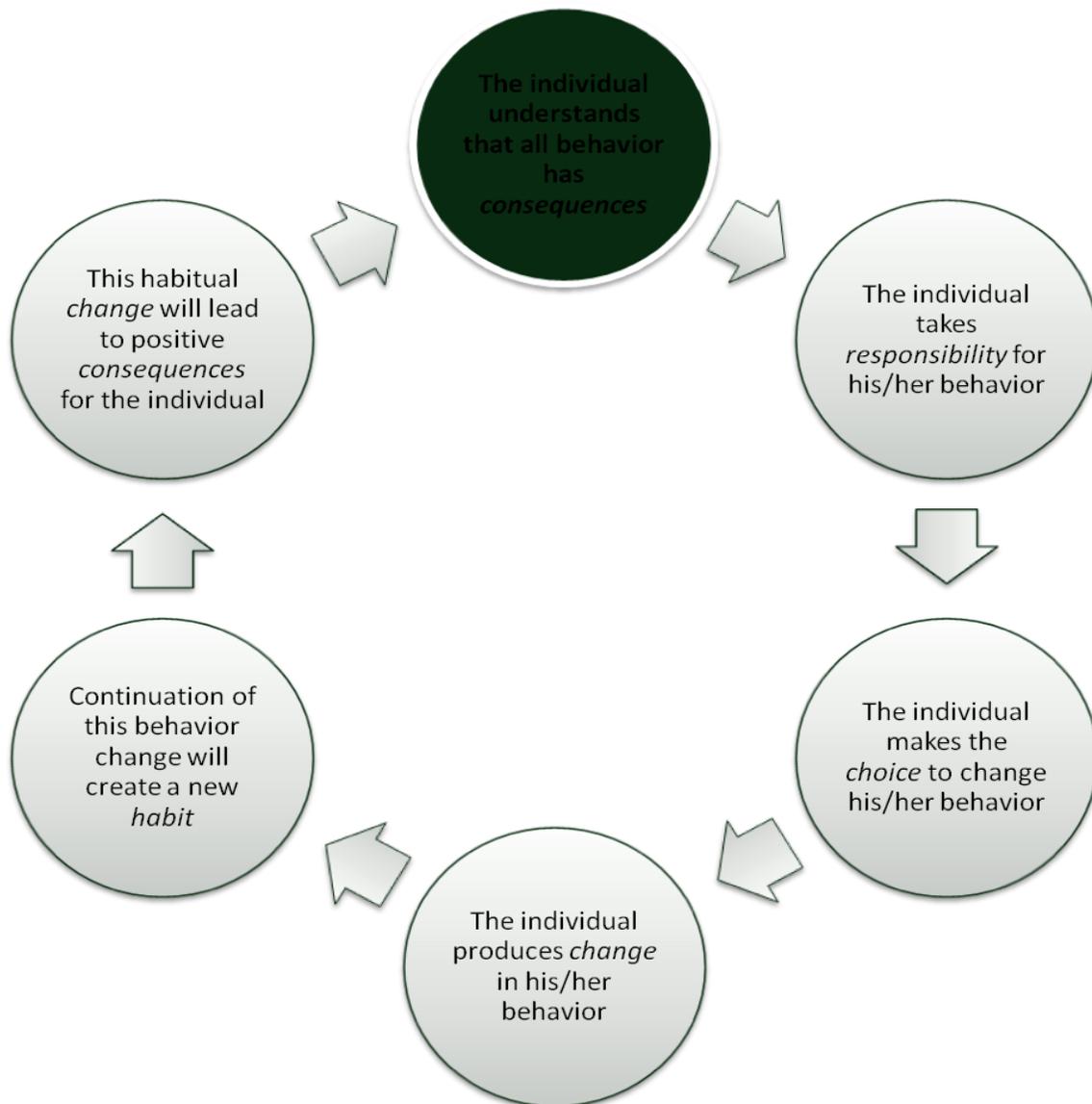
At the end of the high-school season it was obvious that the athlete has more realistic evaluations and expectations of himself with regard to wrestling and school, with some of the bravado of previous interviews missing from the final interview. Perhaps cognitive maturation plays a big part in more realistic evaluations, but the knowledge of how to work hard and set goals were also important aspects. As suggested, a return to the camp indicates he feels there is more to learn, which is a polar opposite from the individual who entered camp one year prior.

Overall, Athlete 7 was seen to develop the skills of hard work and a greater sense of confidence from the camp. Developing psychological skills was not a priority for the athlete during the camp and he did not appear to understand the utility of many of the camp messages for life. Following the camp, the athlete

did show greater reflection on his psychological development and remembered many of the camp messages that indicates a developing maturity.

### The Camp Teaching Philosophy and Curriculum

The analysis of the information gathered from the camp and interviewing the founder provided an understanding of how the psychological skills and characteristics were taught by J Robinson and the camp staff. This is explained in the model below:



## Study Strengths and Limitations

This study had both strengths and limitations. Strengths included the fact that mixed methods were used (e.g., surveys, interviews, observations), validated psychometrically sound instruments employed, and results were triangulated or verified across the different methods. In addition, not only were assessments taken before and after the camp but 9 months later, allowing the investigative team to understand the long-term effects of the camp. Using both quantitative and qualitative data also allowed the investigative team to understand how the effects influenced the campers as a group but also individually. The qualitative interviews and observations also allowed the investigators to gain an understanding of how the camp functioned to induce change in the young wrestlers.

The chief limitation of the camp was the failure to include a control group that took part in a wrestling camp of similar physical intensity but without implementing the J Robinson curriculum. This resulted from the fact that no readily available control camp of similar physical intensity was available to assess and as a result of financial limitations. While the lack of a control group is certainly a weakness it was somewhat offset by including the 9 month assessment which allowed us to understand the lasting effects of the camp. Finally, another limitation of the study was the fact that only 7 of the 216 wrestlers taking part participated (note: Ninety wrestlers took assessments at Time 1 and 10 in the initial interviews but only 70 completed all the assessments and only 8 all the interviews). There is no way of determining if some type of self-selection bias occurred. It should also be noted that one athlete interview was not included in this summary report because of concerns that the athlete's confidentiality could not be protected.

Lastly, our design did not allow us to unpack the influence that the strategies and techniques used in the camp would have had if not employed by J Robinson. For example, Robinson's success and status as one of the nation's top collegiate wrestling coaches certainly commands the young wrestlers' attention and respect. Would a coach of less stature be able to implement the program as effectively? Additionally, it was evident to the entire research team that the J Robinson camp is not just a highly successful business but a passion of someone who is totally devoted to making a difference in young people's lives on and off the mat! This certainly influenced the program.

While these limitations need to be considered in interpreting the findings of this study, the investigative team feels the strengths outweighed the limitations and feel comfortable concluding that the camp was highly effective in achieving its goals. This camp worked and worked well!

## What Does This All Mean?

The key overall findings from the assessment of this intensive wrestling camp include:

- The camp was found to be highly effective at enhancing the psychological development of the participants. Support was found, then, for the camp assertion that "they (participants) will learn lessons that will change their lives, not only in wrestling, but in everything they do" (quote taken

from the camp website).

- Numerous changes occurred pre- to post-camp, some were immediate, while others were more latent and took time to increase. None of the changes reverted back to pre-camp levels.
- The camp lessons were taught and reinforced in multiple ways and the challenging stressful environment was critical in facilitating these changes. However, based on our observations the approach utilized needs to be implemented with a highly competent coaching staff as the potential for overtraining, injury and negative psychological development would be high if a coach was not excellent at reading the physical and psychological states of his or her athletes and implementing the program with considerable care, monitoring and flexibility.
- Psychological development occurred through both direct teaching and experiential learning.
- The transfer of the sport-based psychological skills to life skills was identified by all athletes but experienced differently. These skills included high performance skills that facilitate wrestling and coping/resilience skills for life.
- An individual camper's readiness for the camp experience and openness to learning appeared to guide outcomes.
- The young athletes must be ready physically and psychologically for a camp of this nature. As the founder of the camp told us in the initial interview this is not a camp for all young people. They must be ready for the challenge.
- Scientifically, the findings support the conclusion of Larson and Brown (2007) that young people learn to deal with emotions from "hot" emotional episodes and drawing from the culture and adult leaders around them. This study adds to this literature by showing that intentional challenges can be planned for and structured into youth sport camp programs.
- Findings also support the contentions of Collins and Mac Namara (2012) and Fletcher and Sakar (2013) in that stressful/challenging encounters and learning how to cope with those encounters are critical to psychological growth and the development of mental toughness.

## **Practical Recommendations**

While it was the investigative team's opinion that this camp was well-organized and run and the program well-thought out and implemented, several areas of potential improvement were identified. These are discussed below.

- It is clear that the head coach and camp founder understands and implements the curriculum in an excellent manner. When he is not present the program is not conveyed

with the same passion and intensity. For this reason, in staff training sessions it might be worth considering how coaches and counselors can more specifically convey the philosophy behind the program, specific strategies they can use to help teach and facilitate the mental skills being taught, and ways they can reinforce major program components (e.g., each coach tries to discuss the major thoughts or quote for the day with the young athletes).

- Related to the previous point is the need to identify and train some additional lead coaches that could take the place of J in the future. These individuals could give one of the major talks in the camp with J observing them and providing critiques. It will take special individuals to do this – one's who have the same passion and commitment to the psychological goals of the camp as it's founder.
- One thing this study clearly demonstrated was how important it is for those who are interested in developing athletes psychologically to be very intentional in their efforts and having well-thought out strategies to implement. In addition, they need to spend considerable time evaluating and reflecting on their practices. It was clear that this program is so effective because the founder has used the last 35 year of camps as a laboratory where he has tried different approaches, reflected upon and evaluated them, and then revised the program in future camps. This cyclical process has resulted in a highly effective program that the founder understands and can provide a rationale for all its components, Interestingly, even after 35 years he is continually trying to improve the program and the strategies he uses.
- This camp program optimally uses stressful encounters, challenges, and extremely hard physical conditioning to help develop wrestlers psychologically. To implement the program requires the coach to accurately read his or her athlete's physically and psychologically and then provide an optimal amount of stress and challenge, while at the same time identifying when it will be the best time to promote particular skills and strategies being conveyed in the camp. This requires considerable empathic accuracy– the ability of a coach to “accurately perceive, from moment-to-moment, the psychological condition of the another (the athlete), such as their motivations and the reasoning behind their behaviors “(Lorimer, 2013, p. 28). Moreover, a coach's ability in this area can be improved by gathering information, understanding and then avoiding one's biases, maintaining an openness and empathy with the young athlete so that he or she is not afraid to reveal his or her emotions and feelings, and being reflexive on the entire process. For example, in a camp setting such as the one studied here, it might be useful to have counselors assigned to specific athletes for the purpose of forming a strong relationship with those athletes, logging their thoughts about the athlete's psychological make up and then reflecting on those in meetings with other coaches, deriving the best ways to help the athlete develop during the camp.

## References

- Collins, D., & Mac Namara, A. (2012). The rocky road to the top: Why talent needs trauma. *Sports Medicine*, 42(11), 907-914.
- Fletcher, D. & Sakar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist*, 18(1), 12-23.
- Gould, D., & Carson, S. (2010). The relationship between perceived coaching behaviors and developmental benefits of high school sports participation. *The Hellenic Journal of Psychology*, 7, 298-314.
- Gould, D., & Carson, S. (2011). Young athletes perceptions of the relationship between coaching behaviors and developmental experiences. *International Journal of Coaching Science*, 5(2), 3-29.
- Larson, R. W., & Brown, J. R. (2007). Emotional development in adolescence: What can be learned from a high school theater program? *Child Development*, 78(4), 1083-1099.
- Larson, R. W., Hansen, D.M., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*, 42(5), 849-863.
- Lorimer, R. (2013). The development of empathic accuracy in sport coaches. *Journal of Sport Psychology in Action*, 4, 26-33.
- Smith, R. E., Schultz, R. W., Smoll, F. L., & Ptacek, J. T. (1995). Development and validation of a multidimensional measure of sport-specific psychological skills: The Athletic Coping Skills Inventory – 28. *Journal of Sport and Exercise Psychology*, 17(4), 379-398.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. a, Irving, L. M., Sigmon, S. T., ... Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60(4), 570–85.
- Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. a, & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social psychology*, 70(2), 321–35.
- Vealey, R. S. (1986). Conceptualization of Sport-Confidence and Competitive Orientation : Preliminary Investigation and Instrument Development, 221–246.