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BURNOUT IN SCHOLARSHIP AND NON-SCHOLARSHIP FEMALE COLLEGE SWIMMERS

A Thesis

Submitted

In Partial Fulfillment

of the requirements for the Designation

University Honors

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CHAPTER I

INTRODUCTION

An emerging concern in the world of sports is burnout among amateur athletes. It is a major issue that must be addressed because some of the world's best athletes are becoming victims to it. Not only is burnout affecting athletics, it is effecting the lives of those individuals who burn out and leave sports all together. Athletics help build a foundation of life skills such as communication, teamwork, leadership, and problem solving that athletes rely on daily. Sports provide a safe environment that can help keep the majority of participants out of trouble. It is important to have a better understanding of the causes of burnout, so preventative measures can be taken to decrease burnout amongst athletes.

Burnout has been recognized as one of the most serious problems involving athletics (Gould., Tuffey, Udry, & Loehr, 1996a, 1996b; Smith, 1986; Weinberg & Gould, 1995; 1999). There are a multitude of definitions for burnout none of which are universally accepted. The definition that was used in this research study defines burnout as a "psychological syndrome of emotional/physical exhaustion, reduced sense of accomplishment, and sport devaluation" (Raedeke, 1997, p. 283). This is the definition that was used to generate the "Athlete Burnout Questionnaire" (Raedeke, 1997; Raedeke & Smith, 2001), which was used in this study. In recent years, training intensity and volume have increased dramatically, the pressure to win has escalated, and athletes have begun training at younger ages (Weinberg & Gould, 1999). These adolescents are experiencing too much training too soon and they are continually being pressured by coaches and parents to practice more. The fun aspect of athletics has been

greatly reduced, while the importance of competition has become the main focus. Currently, there are no statistics regarding the percentage of athletes that ultimately burnout (Raedeke & Smith, 2001). It is extremely hard to track burnout amongst athletes because it is not always clear as to the reason they left in the first place. There are two types of burnout: one type, where the athlete leaves the sport and the other, where the athlete continues to stay involved and just goes through the motions (Gould, Tuffey, Udry, & Loehr, 1996). For those athletes that leave, it is difficult to determine if they are leaving because they are burnt out or for other reasons. As the demands of sports have intensified, negative consequences such as burnout have surfaced.

The research data that is currently available was acquired from non-representative samples of athletes thought to be at risk for burnout (Eklund & Cresswell, 2007). It cannot be empirically established that these athletes are representative of the athletic population as a whole. However, the data that is present illustrates that burnout continues to be a concern amongst athletes nationwide, especially swimmers.

In the sport of swimming, burnout is a regular occurrence that happens all too often. Swimmers are very susceptible to burnout due to their high intensity year-round training (Silva, 1990). It is not uncommon for a star swimmer to burn out of swimming before even reaching the high school or collegiate level. Swimming is very unique from all other sports in the sense that it is highly individual and extremely mental. It is a sport that must be started at a very early age in order to succeed. It is rare to have a child join the sport past the age of ten. Specialization in the sport of swimming is an incident that occurs regularly; it is rare to find a

swimmer that is a multi-sport athlete. This is because the majority of competitive swim teams train year-round regardless of the child's age. There is no off-season in swimming and it is extremely difficult to get back in shape after being out of the water for a short period of time. Double practices begin before the child enters high school, so by the time the swimmer reaches college, they have been doing them for years. Morning practices begin as early as five in the morning. Waking up that early to go dive into an ice cold pool is a task that can become daunting with repetition. Swim meets take place practically every weekend and it is the coach's expectation that everyone competes. The majority of these meets take place the entire weekend lasting a good six hours per day, sometimes even more. This prevents a swimmer from hanging out with their non-swimmer friends on a regular basis and the swimmer begins to view the team as their family. The dedication and commitment that is required of swimmers must never cease if success is to be achieved.

STATEMENT OF THE PROBLEM

The primary purpose of this research study is to examine potential differences in the number of burnout symptoms between scholarship and non-scholarship swimmers. A secondary purpose is to gain an understanding of the variables leading to burnout of female college swimmers. Specifically, the study is designed to examine whether the number of years that an individual has been swimming, the events in which swimmers' compete/train and volume of training have an effect on burnout. Lastly, the study will examine the reasons that keep a burnt out swimmer from quitting.

HYPOTHESES

It was hypothesized that scholarship swimmers would exhibit more burnout symptoms than non-scholarship swimmers. The reason for this hypothesis is that scholarship swimmers are motivated not only intrinsically but extrinsically as well. Scholarship swimmers may feel like they are entrapped in the sport due to their scholarship, whereas non-scholarship athletes are swimming solely because they want to (Gould & Dieffenbach, 2002). As extrinsic motivation increases, the level of intrinsic motivation begins to decrease leading to potential burnout symptoms.

Another hypothesis is the more years the swimmer has competed in the sport of swimming, the more likely they are to show signs of burnout. Individuals that have been involved in swimming for a long period of time are highly vulnerable to burnout (Gould, Tuffey, Udry & Loehr, 1996). Also, these swimmers have been exposed to overtraining for years leading them to be more exhausted physically and psychologically (Foster, 2001). An option swimmers see is to discontinue swimming, so they can gain control of their lives again.

In addition, it was hypothesized that sprinters would be more prone to burnout than middle-distance and distance swimmers in the burnout subscale for reduced sense of accomplishments. The races in which a sprinter competes in regularly are so short that improvement is hard to come by. Reduced sense of accomplishment tends to occur when there are unmet expectations and personal goals are not reached (Bridges, Gould, Tuffey & Udry, 1997).

Another hypothesis concerning burnout is that swimmers that specialize in a specific stroke are more vulnerable to burnout than those swimmers that are versatile. Reasoning for this hypothesis is that swimming the same stroke day in and day out eventually gets monotonous.

The hypothesis regarding the volume of training is that swimmers who swam more yards during the course of the week would be more susceptible to burnout. This hypothesis takes the emotional/physical exhaustion subscale of burnout into consideration. The more yards a swimmer completes during the course of a week, the more tired and exhausted they will become both physically and mentally. There comes a point where the body cannot handle any more stress or demands, it just simply needs to rest and recover.

The last hypothesis predicts that the highest prevailing reason for a burnt out swimmer not quitting is that they need and want their scholarship. Paying for college seems to be a concern for many students and their parents in these challenging economic times. Those that are talented enough to receive a scholarship will do almost anything to keep it. This may mean continuing to swim and competing long after they stop enjoying it. Some scholarship athletes view their sport as a job, since they are being paid indirectly. Furthermore, they do not want to be labeled as a quitter, so pride becomes a large factor.

CHAPTER II

SIGNIFICANCE OF THE STUDY

This research study is significant because burnout is an issue that needs to be addressed due to the high burnout rate amongst swimmers. This study is designed to assist swimming professionals in gaining a better understanding of burnout symptoms in non-scholarship and scholarship swimmers, and to gain knowledge into what factors influences these symptoms. It is intended to set the stage for an increased interest in this topic with the hope that additional research will be done in the future to complement these findings and expand upon them. In order to prevent burnout, professionals need to be aware of the causes of burnout and what makes a swimmer more susceptible to burnout.

LITERATURE REVIEW

Research dealing with burnout amongst athletes has been limited due to the lack of an accurate measure of athletic burnout (Raedeke & Smith, 2001). Recently, the “Athletic Burnout Questionnaire” was developed and is the preferred method of burnout testing (Raedeke & Smith, 2001). This is a questionnaire that was devised from the Maslach Burnout Inventory (Maslach & Jackson, 1981, 1986; Maslach, Jackson, & Leiter, 1996). The exhaustion subscale of burnout was extended to include physical exhaustion along with the already present emotional exhaustion (Raedeke, 1997; Raedeke & Smith, 2001). Also, Raedeke replaced the term depersonalization with devaluation because it was more fitting to the athletic population. Currently, there are more unanswered questions dealing with burnout than there are answered

ones. However, on the upside, the majority of studies dealing with burnout utilize swimmers as the subjects for the research. The reasoning behind this is the fact that the training regimen of swimming is extremely intense and the length of the season is incredibly long compared to other sports.

Three studies were completed to ensure that the “Athletic Burnout Questionnaire” provided a reliable measure of athletic burnout. In the first study (Raedeke, 1997), the survey consisted of 21 items with the items being equally split between three categories: emotional/physical exhaustion, reduced sense of swimming accomplishment, and swimming devaluation. Nine of the 21 items were modified from the Eades’ Athletic Burnout Inventory (EABI; Eades, 1990). The ABQ rating scale used: almost never, rarely, sometimes, frequently, and almost always, instead of the previously popular: a few times a year, once a month or less, a few times a month, once a week, a few times a week, and every day. The reason for this was to make it easier for younger children to respond and to appeal to swimmers who do not swim year-round. The surveys were given to three graduate students to read through the content and assess the validity and readability. Changes were made and then seven swimmers made suggestions as well. The surveys were distributed to 236 USA swimmers between the ages of 13 and 18. The results were used to determine how well the items assessed the three subscales of burnout previously discussed. The results indicated that it was a four factor structure with swimming devaluation comprising factor 1, emotional/physical exhaustion factor 2 and reduced sense of accomplishment taking up both factor 3 and 4. Reduced sense of accomplishment was split into two categories because of the positively and negatively worded statements. There

were several statements that cross-loaded on more than one factor and these were removed from the questionnaire.

A second study (Raedeke & Smith, 2001) was completed to solidify the reliability and validity of the “Athletic Burnout Questionnaire.” The relationship between burnout and motivation was closely monitored, and the study showed that there was a positive correlation between burnout and extrinsic motivation, while a negative correlation existed between burnout and intrinsic motivation. This study used 244 male and female USA Swimming participants that ranged from 14 to 19 years of age. The questions used in the first study were presented again in front of a graduate panel, and the panel assessed how well each of the questions portrayed each specific area of burnout. Confirmatory factor analysis was used to analyze the data, and it was found that the revised items, minus two, matched up well with their appropriate burnout subscales. The two that failed to load with their specific subscales were replaced with two questions that were better matches of the subscales in question.

A third study (Raedeke & Smith, 2001) focused on how well the questionnaire could be applied to other sports. The authors knew that it would be applicable to sports with a training regimen similar to swimming that comprised of year-round intense training; however, they were unaware of the applicability towards other sports. In this study, 208 college athletes from a variety of sports participated. In order to make the questionnaire applicable to all sports, the term “swimming” was replaced with “sport” and the word “swim” was replaced with “perform.” In addition, the researchers had 25 athletes retake the test a week after first completing it, in order to retest reliability. The results for the test-retest reliability were good

on all three subscales of burnout. The results from the confirmatory factor analysis proved to be excellent once again with only one question being replaced due to failure to load significantly on its respective subscale. It was concluded that after these three studies the “Athletic Burnout Questionnaire” is both reliable and valid, and can be used to measure burnout in all sports.

The research study completed by Raedeke (1997) was split into four groups of swimmers. There were swimmers that exhibited symptoms of entrapment ($n = 26$), swimmers that were attracted to the sport ($n = 104$), swimmers that were not totally committed to the sport ($n = 66$) and swimmers that felt both entrapped and attracted to the sport of swimming ($n = 40$). The swimmers trained 40,000 meters a week and were actively involved with the team. The participants completed a 21-item athletic burnout scale that assessed different psychological aspects of the sport. The swimmers that were attracted to swimming had the lowest levels of burnout and those swimmers that were a mixture of attraction and entrapment had moderate levels. On the other hand, swimmers that were viewed as entrapped exhibited higher levels of burnout. The entrapped swimmers demonstrated low perceived control and felt pressured to swim. These swimmers were not highly invested in the swimming and gained little enjoyment from the sport itself (Eklund & Cresswell, 2007).

In another study (Lemyre, Treasure, & Roberts, 2006), 44 NCAA Division I swimmers performed intense dryland training in addition to swimming an average distance that exceeded 38,000 yards a week. These swimmers trained year-round, and had been swimming competitively for at least ten years. Their self-determined motivation levels were monitored

throughout the course of the season and were used to predict the athlete's susceptibility to burnout at the conclusion of the competitive season. Results revealed that shifts towards more extrinsic motivation resulted in decreased performance in a practice setting. A follow-up study was designed to look at five successful and five burnout swimmers (Lemyre, Kuczka, Treasure, & Roberts, 2005). The successful athletes showed a high degree of intrinsic motivation. These swimmers reported that they enjoyed their time spent training in the pool, and viewed swimming as an important part of their life (Lemyre, Kuczka, Treasure, & Roberts, 2005). The successful swimmers were essentially swimming because they wanted to and they had a love for competition. The burnt out swimmers, on the other hand, revealed extrinsic motivation as their primary reason for participating in swimming. Specific reasons mentioned include pressure from family members to continue swimming; need to keep their scholarship, fear of letting their team down and the desire to finish off their swimming career on a positive note (Treasure, Lemyre, Kuczka, & Standage, 2007).

Cresswell and Eklund (2006) state that athletes on an athletic scholarship may feel entrapped and obligated to continue to participating in athletics. These individuals have athletic obligations to uphold and not fulfilling them will result in the loss of their scholarship. Plus, they feel compelled to continue their participation because they do not want to let the team down. Entrapment causes an athlete to be more susceptible to burnout and can lead to lower motivation, emotional detachment, less satisfaction and poor performance (Cresswell & Eklund, 2006).

Jay Coakley (1992) argues that the time commitment required by competitive sport programs causes the athlete to develop a unidimensional identity in which the individual sees herself as only an athlete. Individuals who have developed this type of personality are often only focused on their sport. The attainment of athletic scholarships removes the decision making ability from the athlete and ultimately creates a more unidimensional identity. This may cause the athlete to feel powerless because she no longer has the ability to provide direction to her life. The athlete feels as if she is being told what she can or cannot do, and when she is to do it. In a sense, she is being told what to do. It is not unusual for a coach to tell their team when to take classes, when practice is and what to wear. Coaches provide a structure that is needed by the team, but it leaves little room for individuality amongst the athletes.

Intrinsic motivation is when an athlete participates in a sport for pure enjoyment and love of the sport (Eliot, 2005). Often, athletes are motivated intrinsically to compete in sports that increase their sense of accomplishment. Extrinsic motivation is when sport participation is guided by the desire for trophies, scholarships and the approval of others (Vallerand, 1997a). Most athletes are motivated both intrinsically and extrinsically, however, when extrinsic motivation becomes the primary reason for sport involvement, problems begin to surface. This intrinsic motivation shifts towards extrinsic motivation as soon as they start receiving money for the sport in which they participate (Deci, 1985). The reason for this is that as extrinsic rewards are added, intrinsic motivation starts to suffer and athletes become less enthused about their sport participation (Lepper & Greene, 1975; Orlick & Mosher, 1978; Eliot, 2005). It

is at this point that the athlete has officially lost control. If the athlete views the external rewards in a personal light, then motivation will remain high, and they are likely to continue to be successful. An example of this would be an athlete that views a college scholarship as the opportunity to further her education and obtain a job in the future (Eliot, 2005). This would positively affect this athlete's motivation to succeed as opposed to an athlete who views the scholarship as a full-time job. Intrinsic motivation is the most successful form of motivation because it allows the athlete to connect effort and hard work with satisfaction and success.

Intrinsic motivation is classified into three categories: motivation towards knowledge, accomplishment and experiencing stimulation (Lavalley, Kremer, Moran, & Williams, 2004). Extrinsic motivation is also classified into three categories: external regulation (to achieve a reward to avoid punishment), introjected regulation (forced or pressured participation) and identified regulation (participation by choice but not by interest) (Lavalley, Kremer, Moran, & Williams, 2004). There may be an inverse relationship with burnout for identified regulation since this type of extrinsic motivation allows the athlete to make the decision themselves. However, introjected and external regulation reveal a positive relationship with burnout since the athlete is largely controlled (Cresswell & Eklund, 2005b).

The majority of sports have a withdrawal rate of one-third in adolescent populations; however, for the sport of swimming, the withdrawal rate is much higher (Weiss & Petlichkoff, 1989). This can be attributed to highly intense training year round that includes practicing twice a day for the majority of the year. Ego-oriented athletes are motivated when given the opportunity to compete against other athletes, whereas, task-oriented individuals gain

motivation through mastery of a task or improvement of a skill. It is believed that task-oriented individuals are more intrinsically motivated than ego-oriented people because they have more self-determination (Frederick & Ryan, 1993).

Research has shown that individuals that feel obligated to continue competing in their sport are more likely to become burnt out than athletes who are attracted or indifferent to the sport in question (Raedeke, 1997). Burnt out athletes tend to view their commitment to the sport as being intensive, and they often believe that success may be near, whereas, drop-outs simply view alternatives as more favorable (Lavalley, Kremer, Moran, & Williams, 2004).

DEFINITIONS

Overtraining often leads to burnout. It is defined as “a process involving progressively increased training to a high absolute level that is in excess of more routine training undertaken to maintain performance” (Raglin, 1993). Overtraining is designed to enhance performance but often it has reverse effects on an athlete leading to burnout.

Entrapment is when an athlete feels as if they have to continue to participate in their sport (Gould & Dieffenbach, 2002). They see no other option or alternative. These athletes no longer enjoy the sport because they believe the costs outweigh the rewards (Raedeke, 1997). However, they have put too much time and effort into the sport, to quit now. So, they go through the motions and continue to practice and compete half-heartedly.

One of the three subscales of burnout is reduced sense of accomplishment. This subscale is depicted by lack of improvement and frustration from the swimmer because they

have hit a plateau. A potential sign of burnout is when the swimmer has difficulty grasping the idea that they are not performing up to their expectations. These swimmers begin to shut down mentally and physically because they feel like no matter how hard they work, their performance is not going to improve (Raedeke, Lunney, & Venables, 2002). They feel that their swimming accomplishments do not accurately display their hard work and dedication. This is due to unrealistic goals that swimmers set for themselves or their past performances (Raedeke, Lunney, & Venables, 2002). A swimmer may have been a prodigy at an early age, however, their speed will begin to level off and they will become more equal to their competitors. This change in atmosphere leaves the swimmer vulnerable to burnout because they are not always able to fathom why they are no longer the best.

Another subscale of burnout that impacts swimmers is emotional/physical exhaustion. This occurs most often when the swimmer is over trained and they have pushed themselves as far as they can go. They are not getting adequate recovery time and their bodies cannot handle any more stress (Raedeke, Lunney, & Venables, 2002). They find it increasingly difficult to handle the physical and mental demands of the sport.

The last subscale of burnout is sport devaluation which is when a swimmer no longer cares about their swimming performance. They begin to lose interest in everything they use to love about the sport of swimming. They start to distance themselves from the sport and view swimming in a very negative light. In extreme cases, they develop hatred towards the sport (Raedeke, Lunney, & Venables, 2002).

CHAPTER III

METHODS

PARTICIPANTS

The athletes that participated in this study were National Collegiate Athletic Association (NCAA) female collegiate swimmers from universities throughout the Midwest. A total of 89 swimmers completed the surveys with 39 being Division I swimmers, 28 being Division II swimmers, 21 being Division III swimmers and 1 swimmer not classifying which division school they attended. The swimmers were between the ages of 18 and 23 with a mean age of 19.83 years ($SD = 1.29$). 29.5 % of these swimmers were freshman, 21.6 % were sophomores, 25.0 % were juniors and 23.8 % were seniors. These participants competitively swam an average of 37,431.82 yards ($SD = 9,390.99$), which is approximately 1,497 lengths of the pool or almost 23 miles per week. On average, these swimmers reported practicing 16-20 hours a week.

MEASURES

DEMOGRAPHIC QUESTIONNAIRE

All swimmers completed a demographic information sheet (see Appendix A) that contained twelve questions that applied to an individual's swimming career, training, and competitions. More specifically, the questions asked about the time spent practicing, completing swimming related obligations, whether they competitively swim in the summer and the number of months they do so. This survey also asked the events in which they swim and if they receive any sort of athletic scholarship. Answers were provided and the answer that best

applied to the individual was circled. Questions were answered as they applied to the athlete during the current season.

ATHLETIC BURNOUT QUESTIONNAIRE

The swimmers completed the “Athletic Burnout Questionnaire” (ABQ) (see Appendix B), which contains fifteen statements that cover three subscales of burnout; reduced sense of accomplishment, emotional/physical exhaustion, and devaluation (Raedeke & Smith, 2001). The questionnaire is applicable to all athletes and is designed so the word “sport” can be replaced with “swimming”. This strategy has been used by a number of researchers in recent years. Specifically, Cresswell and Eklund (2005b) substituted the word “rugby” for “sport” in their research study involving amateur New Zealand Rugby Union players. An example of a statement referring to reduced sense of accomplishment is, “It seems that no matter what I do, I don’t perform as well as I should.” An emotional/physical exhaustion statement is, “I am exhausted by the mental and physical demands of swimming.” A statement pertaining to devaluation is, “I don’t care as much about my swimming performance as I used to.” The participants responded with the degree in which the statement applied to them. The scale used was a 5-point Likert scale that went from 1 to 5 with 1 being almost never and 5 standing for almost always.

PROCEDURE

The research study received IRB approval before the study itself was initiated. Upon IRB approval, head coaches of college swim teams throughout the Midwest were contacted by e-

mail, for permission to allow their team to participate in the research study. The purpose of the research and the procedure was explained in thorough detail in the e-mail (see Appendix C). The coaches were asked to reply to the e-mail if they were interested in their team participating and this reply served as the letter of support for the IRB. For those teams that were willing to participate, the study was explained in full detail following the conclusion of the swim meet. Each swimmer was then given a pen and a manila envelope with a demographic information sheet, the ABQ and a consent form. The swimmers that wanted to participate were asked to sign a consent form (see Appendix D) verifying that they were aware of possible risks that may result from the research and that they were voluntarily participating. Those swimmers that gave consent then completed the "Athletic Burnout Questionnaire" (ABQ) and the demographic information sheet. Participants were given as much time as necessary to complete the questionnaire and information sheet. Upon completion of the surveys, the swimmers were asked to place the signed consent form, completed demographic information sheet and the "Athletic Burnout Questionnaire" back in the manila envelope for return. All participants were surveyed during their competition season between the months of December and March.

To increase the sample size of non-scholarship college swimmers, the research study was modified and reapproved by the IRB, so that the surveys could be e-mailed to college swimmers. Division III schools throughout the Midwest were randomly chosen and the rosters were obtained from the athletic team's website. The e-mail addresses of the swimmers were then looked up in the directory and they were sent an e-mail (see Appendix E) explaining the purpose of the study and the procedure. If the swimmers wanted to participate, the surveys

were attached to the e-mail, and all they had to do was type in their responses and send them back as an attachment. 21 of the 89 surveys were completed in this manner. These surveys were completed within the time span of February 24 - March 1, 2010. Research shows that data collected through emails is psychometrically comparable to data obtained from the questionnaires distributed in person (Lonsdale, Hodge, & Rose, 2006).

CHAPTER IV

RESULTS

For this research study, the overall mean on the reduced sense of accomplishment subscale was 2.32 ($SD = .78$). The overall mean for the emotional/physical exhaustion subscale was 2.98 ($SD = .73$), while the overall mean for the devaluation subscale was 2.43 ($SD = .86$). Also, means were calculated to test each of the hypotheses.

To examine the hypothesis that scholarship swimmers would display more burnout symptoms than non-scholarship swimmers, three independent-samples t tests were performed using the subscale results of the Athletic Burnout Questionnaire. T test results comparing the mean scores of scholarship and non-scholarship swimmers on the subscale of emotional/physical exhaustion found a significant difference between the means of the two groups ($t(85) = 2.11, p < .05$). The mean of the scholarship swimmers was significantly higher ($m = 3.13, SD = .71$) than the mean of the non-scholarship swimmers ($m = 2.81, SD = .68$). T test was also calculated comparing the mean score of scholarship swimmers and non-scholarship swimmers on the reduced sense of accomplishment subscale of burnout. No significant difference was found ($t(85) = .42, p > 0.05$). The mean of the scholarship swimmers ($m = 2.35, SD = .86$) was not significantly different from the mean of the non-scholarship swimmers ($m = 2.27, SD = .67$). Finally, a t test was calculated comparing the mean score of scholarship swimmers and non-scholarship swimmers on the devaluation subscale of burnout. No significance was found ($t(85) = .71, p > 0.05$). The mean of the scholarship swimmers ($m = 2.50, SD = .90$) was not significantly different from the mean of the non-scholarship swimmers

on the devaluation subscale of burnout ($m = 2.37, SD = .80$). Scholarship swimmers were found to have significantly higher burnout scores only on the emotional/physical exhaustion subscale.

The hypothesis that the more years the swimmer has competed in the sport of swimming, the more likely they are to show signs of burnout does not have sufficient evidence to support the claim in any of the three subscales. This hypothesis was tested by splitting the participants into two groups. Freshmen and sophomores were classified as underclassmen, while juniors and seniors were considered upperclassmen. Independent-samples t tests were calculated comparing the mean score of underclassmen swimmers to the mean score of upperclassmen swimmers on all three subscales. No significant difference was found for the reduced sense of accomplishment ($t(86) = -.01, p > .05$). The mean of underclassmen swimmers ($m = 2.32, SD = .71$) was not significantly different from the mean of upperclassmen swimmers ($m = 2.33, SD = .86$). T test results on the emotional/physical exhaustion subscale also failed to reveal a significant difference ($t(86) = -.98, p > 0.05$). The mean of the underclassmen swimmers ($m = 2.92, SD = .86$) was not significantly different from the mean of the upperclassmen ($m = 3.07, SD = .73$). Lastly, t test was calculated comparing underclassmen swimmers to upperclassmen swimmers on the devaluation subscale of burnout. No significant difference was found ($t(86) = -.93, p > .05$). The mean of the underclassmen swimmers ($m = 2.36, SD = .82$) was not significantly different from the mean of the upperclassmen swimmers ($m = 2.53, SD = .90$). Therefore, the null hypothesis regarding reduced sense of accomplishment, emotional/physical exhaustion and devaluation cannot be rejected.

The hypothesis regarding the number of years a swimmer swam competitively was also tested by splitting the swimmers into novice and expert groups. The novice group was those swimmers that had competitively swam for less than ten years and expert swimmers were those that had been swimming for more than ten years. The hypothesis was that the experts would be more vulnerable to the three subscales of burnout than the novice swimmers. Independent-samples t tests were calculated comparing the mean score of novice swimmers with the mean scores of expert swimmers. No significant difference was found on the reduced sense of accomplishment ($t(85) = .40, p > 0.05$). The mean of novice swimmers ($m = 2.39, SD = .68$) was not significantly different from the mean of expert swimmers ($m = 2.31, SD = .83$). Similarly, a t test comparing the mean score of novice swimmers to the mean score of expert swimmers on the emotional/physical exhaustion subscale for burnout revealed no significant differences ($t(85) = -1.32, p > 0.05$). The mean of the novice swimmers ($m = 2.85, SD = .67$) was not significantly different from the mean of upperclassmen ($m = 3.07, SD = .73$). Lastly, a t test was calculated comparing novice swimmers to expert swimmers on the devaluation subscale of burnout. No significant difference was found ($t(85) = -1.22, p > .05$). The mean of the novice swimmers ($m = 2.28, SD = .68$) was not significantly different from the mean of the expert swimmers ($m = 2.52, SD = .92$). Therefore, there is not sufficient sample evidence to support the claim that expert swimmers are more susceptible to burnout than novice swimmers.

The hypothesis that sprinters would be more prone to burnout than middle-distance and distance swimmers in the burnout subscale for reduced sense of accomplishments failed to be supported by the data collected. An independent-samples t test was calculated comparing

the mean score of sprint swimmers with the mean scores of middle-distance and distance swimmers on the reduced sense of accomplishment subscale. No significant difference was found ($t(86) = .28, p > 0.05$). The mean of sprint swimmers ($m = 2.35, SD = .74$) was not significantly different from the mean of middle-distance and distance swimmers ($m = 2.31, SD = .81$). Therefore, the null hypothesis fails to be rejected and there is not sufficient sample evidence to support the claim that sprinters are more prone to burnout than middle-distance and distance swimmers regarding reduced sense of accomplishment.

The hypothesis that swimmers that specialize in a specific stroke are more vulnerable to burnout than those swimmers that are versatile does not have sufficient sample evidence to support the claim. Independent-samples t tests were calculated comparing the mean score of specialized swimmers with the mean scores of versatile swimmers on all three subscales. No significant difference was found on the reduced sense of accomplishment subscale ($t(86) = -.10, p > 0.05$). The mean of specialized swimmers ($m = 2.32, SD = .91$) was not significantly different from the mean of versatile swimmers ($m = 2.33, SD = .64$). T test results comparing the mean score of specialized swimmers to the mean score of versatile swimmers on the emotional/physical exhaustion subscale found no significant difference ($t(86) = -.39, p > 0.05$). The mean of the specialized swimmers ($m = 2.97, SD = .64$) was not significantly different from the mean of versatile swimmers ($m = 3.03, SD = .78$). Lastly, t test was calculated comparing the mean scores of specialized swimmers to the mean score of versatile swimmers on the devaluation subscale. No significant difference was found ($t(86) = -.61, p > .05$). The mean of the specialized swimmers ($m = 2.39, SD = .95$) was not significantly different from the mean of

the versatile swimmers ($m = 2.50, SD = .76$). When specialized swimmers are compared with versatile swimmers the null hypothesis fails to be rejected.

Three independent-samples t tests were also calculated comparing the mean scores of specialized swimmers with the mean scores of versatile swimmers including IM on the three burnout subscales. No significant difference was found on the reduced sense of accomplishment subscale ($t(86) = -.46, p > 0.05$). The mean of specialized swimmers ($m = 2.27, SD = .70$) was not significantly different from the mean of versatile swimmers ($m = 2.35, SD = .82$). A t test comparing specialized swimmers to versatile swimmers on the emotional/physical exhaustion subscale found no significant difference ($t(86) = -.75, p > 0.05$). The mean of the specialized swimmers ($m = 2.91, SD = .60$) was not significantly different from the mean of versatile swimmers ($m = 3.04, SD = .76$). Lastly, t test results did not reveal a significant difference on the devaluation subscale ($t(86) = -1.91, p > .05$). The mean of the specialized swimmers ($m = 2.19, SD = .71$) was not significantly different from the versatile swimmers ($m = 2.56, SD = .89$).

Swimmers that swam more yards during the course of the week are more susceptible to burnout is another hypothesis that does not have sufficient evidence to support its claim. Independent-samples t tests were calculated comparing the swimmers that swam less than 40,000 yards during the week with swimmers that swam more than 40,000 yards a week for all three subscales. No significant difference was found on the reduced sense of accomplishment subscale ($t(86) = 1.07, p > 0.05$). The mean of swimmers that swam less than 40,000 yards a week ($m = 2.40, SD = .79$) was not significantly different from the mean of the swimmers that

swam more than 40,000 yards a week ($m = 2.23, SD = .77$). Similarly, no significant difference was found on the emotional/physical exhaustion subscale ($t(86) = -.57, p > 0.05$). The mean of the swimmers that swam less than 40,000 yards a week ($m = 2.96, SD = .77$) was not significantly different from the mean of swimmers that swam more than 40,000 yards a week ($m = 3.05, SD = .64$). Lastly, no significant difference was found on the devaluation subscale ($t(86) = .47, p > .05$). The mean of swimmers that swam less than 40,000 yards a week ($m = 2.48, SD = .89$) was not significantly different from the mean of swimmers that swam more than 40,000 yards a week ($m = 2.39, SD = .83$).

REASONS FOR SWIMMING

The most common response amongst the swimmers as to the reason they were currently swimming was for the team atmosphere and friendships. This was the answer of 44.9% of swimmers. Three other reasons that were often used were that they loved the sport and were very passionate about it, they swam to stay in shape and they swam for the scholarship. 43.8% of swimmers responded that they were swimming because they loved it, while 25.8% of swimmers were swimming to stay in shape. Of the swimmers that were on scholarship, 35.3% of them answered that they were currently swimming for their scholarship.

A *post hoc* decision was made to examine potential differences on the Athletic Burnout Questionnaire subscales based on the four most common reasons for continued swimming participation. An independent-samples t test comparing the mean scores of swimmers that were swimming because they love it to swimmers that were swimming for reasons other than loving it found a significant difference between the means of the two groups ($t(87) = -3.58, p <$

.05) on the reduced sense of accomplishment subscale. The mean of the love it swimmers was significantly lower ($m = 2.01, SD = .70$) than the mean of the swimmers that were swimming for other reasons ($m = 2.56, SD = .75$). T test results also found a significant difference between the means of the two groups ($t(87) = 2.58, p < .05$) on the emotional/physical exhaustion subscale of burnout. The mean of the love it swimmers was significantly lower ($m = 2.76, SD = .68$) than the mean of the swimmers that were swimming for other reasons ($m = 3.15, SD = .72$). Finally, t test results found a significant difference between the means of the two groups ($t(87) = 4.38, p < .05$) on the devaluation subscale. The mean of the love it swimmers was significantly lower ($m = 2.02, SD = .79$) than the mean of the swimmers that were swimming for other reasons ($m = 2.75, SD = .77$).

Three independent-samples t tests were also calculated comparing mean subscale scores of swimmers that were swimming because of the team atmosphere and friendships with the mean scores with swimmers that did not include the team as a reason to why they were swimming. No significant difference was found on the reduced sense of accomplishment subscale ($t(87) = -.48, p > 0.05$). The mean of swimmers that are swimming because of the team atmosphere and friendships ($m = 2.28, SD = .74$) was not significantly different from the mean of the swimmers that swam for other reasons ($m = 2.36, SD = .82$). Likewise, t test results found no significant difference on the emotional/physical exhaustion subscale ($t(87) = .32, p > 0.05$). The mean for swimmers that swam because of the team atmosphere and friendships ($m = 2.96, SD = .82$) was not significantly different from the mean of swimmers that swim for other reasons ($m = 3.00, SD = .64$). Lastly, no significant difference was found on the devaluation

subscale ($t(87) = -.93, p > .05$). The mean of swimmers that swim because of team atmosphere and friendships ($m = 2.53, SD = .82$) was not significantly different from the mean of swimmers that swim for other reasons ($m = 2.36, SD = .89$).

Three additional independent-samples t tests were used to compare subscale mean scores of swimmers that were swimming because it keeps them in shape to swimmers that did not include it keeps me in shape as a reason to why they were swimming. No significant difference was found on the reduced sense of accomplishment subscale ($t(87) = .04, p > 0.05$). The mean of swimmers that are swimming because it keeps them in shape ($m = 2.31, SD = .60$) was not significantly different from the mean of the swimmers that swam for other reasons ($m = 2.32, SD = .84$). Similarly, no significant difference was found on the emotional/physical exhaustion subscale ($t(87) = .59, p > 0.05$). The mean for swimmers that swam to keep in shape ($m = 2.90, SD = .81$) was not significantly different from the mean of swimmers that swim for other reasons ($m = 3.01, SD = .70$). Lastly, no significant difference was found on the devaluation subscale ($t(87) = -1.62, p > .05$). The mean of swimmers that swim because it keeps them in shape ($m = 2.68, SD = .81$) was not significantly different from the mean of swimmers that swim for other reasons ($m = 2.35, SD = .86$).

The final independent-samples t tests compared the mean subscale scores of swimmers that were swimming because of their scholarship to swimmers that were swimming for reasons other than scholarship. Results revealed a significant difference between the means of the two groups ($t(50) = -2.64, p < .05$) on the reduced sense of accomplishment subscale. The mean of the swimmers that were swimming because of their scholarship was significantly higher ($m =$

2.74, $SD = .94$) than the mean of the swimmers that were swimming for other reasons ($m = 2.12$, $SD = .73$). Results also found a significant difference between the means of the two groups ($t(50) = -2.96$, $p < .05$) on the emotional/physical exhaustion subscale. The mean of the swimmers that were swimming because of their scholarship was significantly higher ($m = 3.49$, $SD = .73$) than the mean of the swimmers that were swimming for other reasons ($m = 2.93$, $SD = .62$). A significant difference was also found between the two groups ($t(50) = -3.75$, $p < .05$) on the devaluation subscale. The mean of the swimmers that were swimming because of their scholarship was significantly higher ($m = 3.05$, $SD = .86$) than the mean of the swimmers that were swimming for reasons other than scholarship ($m = 2.18$, $SD = .77$).

CHAPTER V

DISCUSSION

The goal of this research study was to gain an understanding of the variables that may lead to burnout in female college swimmers, while examining the reasons that a swimmer continues to swim. The results obtained from this research study could be used to assist swimming professionals in creating an atmosphere that deters burnout. It is essential that coaches, parents and athletes are aware of the causes of burnout and what can be done to avoid it.

The means that were obtained from this research study were similar to other studies (Raedeke, 1997; Raedeke & Smith, 2001; Cresswell & Eklund, 2005a, 2005b, 2005c; Lemyre, Treasure, & Roberts, 2006; Lonsdale, Hodge, & Rose, 2006) that used the ABQ to measure burnout in athletes. A research study by Raedeke (1997) using U.S. age group swimmers reported a mean on the reduced sense of accomplishment subscale of 2.32 ($SD = .74$). The mean on the emotional/physical exhaustion subscale for Raedeke's study was 2.47 ($SD = .83$), while the mean for the devaluation subscale was 2.02 ($SD = .84$). There was another research study that used U.S. collegiate swimmers as the participants and it was done by Lemyre, Treasure and Roberts (2006). The mean on the reduced sense of accomplishment subscale was 2.50 ($SD = .92$) and the mean on the emotional/physical exhaustion subscale was 2.88 ($SD = .92$). This research study had a mean for the devaluation subscale of 1.92 ($SD = .82$). Means for the emotional/physical exhaustion subscale have consistently been the highest of the three subscales with the means falling between the "rarely" and "sometimes" category.

The data collected from the present research study had similar results with the emotional/physical exhaustion subscale having the highest subscales mean. For previous research, means for the reduced sense of accomplishment subscale were typically slightly lower than the emotional/physical exhaustion subscale with the devaluation subscale producing the lowest means that fell into the “rarely” category. This did not hold true for the current research study because the means of the devaluation subscale were higher than the reduced sense of accomplishment subscale.

As a whole, the data collected from this research study produced means that were slightly larger than those previously published (Eklund & Cresswell, 2007). This could be due to the time of the season in which the data was collected. Cresswell and Eklund (2005a) found that burnout levels increased over the duration of the season. Thus, the time of the season may have had an effect on the data obtained.

SCHOLARSHIP & NON-SCHOLARSHIP SWIMMERS

Results of this study revealed a significant difference between scholarship and non-scholarship swimmers on one of the three burnout subscales. A difference in emotional/physical exhaustion was that the majority of scholarship athletes were Division I and II swimmers as opposed to the non-scholarship swimmers who were primarily Division III swimmers. 89.4 % of Division I and II swimmers reported that they swam 16+ hours a week, while only 61.9 % of Division III swimmers swam a similar amount. The scholarship swimmers are spending more time in the water, which may contribute to a higher level of emotional and physical exhaustion. Their bodies are experiencing more stress due to more hours working out.

Another possible reason is that scholarship athletes may feel pressure to succeed due to their scholarship status. It is the fastest athletes that receive the media attention or that anchor a relay that may decide the outcome of the meet. These athletes more often than not are scholarship athletes. Being in the spotlight on a regular basis regardless of whether it's due to good or bad performances can be mentally exhausting.

There are several explanations as to why scholarship swimmers did not display a significant difference from non-scholarship swimmers in burnout symptoms related to a reduced sense of accomplishment. Scholarship status should not have a major effect on one's performance level. Being a scholarship athlete does not mean that you are always going to have the races of your life or compete up to your ability. Swimming comes with its ups and downs and that holds true for scholarship and non-scholarship swimmers alike. The goals swimmers set are applicable to themselves and only themselves. Reduced sense of accomplishment is evident when a swimmer continually fails to meet or exceed those goals and this may occur in both types of swimmers.

An explanation as to why scholarship swimmers did not exhibit more devaluation burnout symptoms could be the time in the year that the questionnaires were taken. All questionnaires were completed within the last month of the swim season. The end of the season was approaching and the swimmers may have been excited for the opportunity to compete against the best in their conference and obtain their best times. With only a few weeks left in the season, taper had begun and this part of the season is generally viewed as positive for most swimmers. It is during this time that practices get shorter and rest becomes

more strongly emphasized. The swimmers already have a solid endurance base from the previous five months of training to build upon. With rest, speed should increase and the swimmers should be able to take their races out faster, while still being able to hold on in the end. During this time, most swimmers are anxious to compete at the championship meet so that they can see all their hard work pay off. A few days prior to the meet, yardage will drastically drop with the swimmers essentially just warming up. The Division I and II swimmers that were surveyed for this research were in the process of tapering when the questionnaires were completed and this may have influenced their responses. The Division III swimmers completed their surveys the week after their conference meet so their performance may have influenced how they responded to the questionnaire or if they responded at all.

YEARS SPENT SWIMMING

The failure to find a significant difference in reduced sense of accomplishment for underclassmen/upperclassmen and novice/expert swimmers may be attributed to the idea that regardless of the number of years on the team, they are all collegiate athletes. Being a collegiate athlete is an accomplishment that few athletes ever achieve. Both classifications probably had swimmers that did not perform up to their expectations, sustained an injury or had a change in priorities that would contribute to a reduced sense of accomplishment.

A person's sense of accomplishment may also be very relative. Swimmers set their goals based on past experiences. A swimmer may view perfecting their flip turns as an accomplishment, while another may view winning a race as an accomplishment. Swimmers plateau periodically throughout their career, so it likely that most swimmers experience a

reduced sense of accomplishment at some time. A possible explanation for no significant difference in burnout symptoms on the emotional/physical exhaustion subscale is that these athletes are all enduring the same practices day in and day out. If they are essentially doing the same workout there is no reason for there to be a difference in burnout. Perhaps, over time swimmers are able to adapt to the workload since it has become a routine.

In a study by Harris (2005), there was found to be no significant relationship between the number of years spent swimming competitively, the number of hours spent on engaging in swimming-related activities, and the results of the "Athletic Burnout Questionnaire". The present study supports these findings.

EVENTS SWAM

T-test results showed there were no significant differences between sprinters and middle-distance/distance swimmers or specialized versus versatile swimmers in burnout symptoms. It may be that regardless of distance of event or stroke, these swimmers are training hard throughout the season. No one group is more likely to experience success than another.

Specialized swimmers and versatile swimmers are very similar in burnout symptoms on all three subscales of burnout. This could be attributed to several reasons. The swimmer may be a specialist because they never had the desire to train other strokes or they enjoy swimming one stroke. A specialist may enjoy swimming one stroke because they are strong in it or are weak in the other three strokes. Athletes like to practice what they are good at. So, if they are

not good at the other strokes, then they do not want to train or compete in them. Perhaps, both groups have grown accustomed to the workouts and the practices are relative to the events in which they normally compete.

YARDAGE

A potential explanation is that there was simply not a large enough difference in the yardage between the two groups. The majority of swimmers answered that they swam 35,000 yards and 40,000 yards, which in the scheme of things is not a large difference in yardage. I

REASONS FOR SWIMMING

The swimming participants gave four reasons as to their swimming participation. Only two of these reasons had significant differences between the means on all three subscales of burnout. These reasons were love to swim and swimming for a scholarship.

One might propose that swimmers who swim because they love the sport are involved for intrinsic reasons. They enjoy and have a passion for swimming and that is gratifying. A swimmer that gave other reasons may love the sport but it was not the primary reason why they swam. Athletes who are swimming because they love it are less susceptible to burnout symptoms, which was depicted by the lower scores on each of the burnout subscales. Perhaps, a swimmer that loves the sport is better able to handle the challenges that come along with the sport because their love for it triumphs everything else. The negatives may outweigh the positives for a swimmer that does not love the sport, leading to potential burnout symptoms.

Interestingly, the data examining whether scholarship swimmers are more susceptible to burnout than non-scholarship swimmers was conflicting. It appears that it is not the actual scholarship that is the determining factor since the only difference based on scholarship status was on the emotional/physical exhaustion subscale. However, there were significant differences between swimmers on scholarship who indicated that this was the primary reason for continued participation. Specifically, the data indicates that swimmers who are swimming for the scholarship money are more prone to burnout than swimmers that are participating for other reasons. Thus, it is not whether or not the swimmer has a scholarship that will have an influence on their likelihood of burnout, but how the swimmer interprets the scholarship. Based on the results, it appears that a swimmer that perceives the scholarship as an opportunity to continue their education, while contributing to the university athletics program, is an unlikely candidate for burnout. While this individual is receiving a form of extrinsic motivation, the swimmer seems to be participating for herself and not because she is feeling controlled. The concern may be when the swimmer begins to view swimming as a job and continues to compete just for the money. It is at this point that the swimmer may become overwhelmed with extrinsic motivation and burnout is more likely to result. The swimmer may begin to feel a loss of control over their life and actions. While some swimmers may quit because the cons outweigh the pros, others struggle through their career afraid to quit and unsure what to do.

RECOMMENDATIONS

Burnout can often be avoided if parents, athletes and coaches are able to detect the warning signs early and take action immediately. The symptoms of burnout vary from one individual to the next, however, the ones which are commonly apparent are: reduced sense of accomplishment, emotional/ physical exhaustion and devaluation. When a swimmer shows signs of burnout it is imperative that someone recognizes it and takes action. Burnout is preventable if acknowledged early on by a coach or parent. In a study by Lunney, Raedeke and Venable, one of the most important preventative measures was developing a support system. Swimmers need to know that their coaches, parents, and teammates care about them, not only as a swimmer but as a person as well (Lunney, Raedeke, & Venables, 2002). Team cohesion needs to be emphasized throughout the season. It is important for swimmers to train with kids that are their age, so that they can develop friendships between one another. This gives the swimmer a reason to want to come to practice, so that they can see their friends (Lunney, Raedeke, & Venables, 2002).

One way for a coach to avoid burnout amongst their collegiate swimmers is to incorporate some fun into practices. Fun is one of the primary needs that an athlete hopes to encounter with sport participation (Burton & Raedeke, 2008). A survey of 10,000 athletes concluded that having fun was the number one reason children participate in sports (Ewing & Seefeldt, 1990; Seefeldt, Ewing, & Walk, 1992). Often the fun factor is eliminated as athletes get older and more experienced and this is not necessarily prudent considering motivation is enhanced when the athlete is having fun and enjoying oneself (Burton & Raedeke, 2008). Therefore, as a coach, it is essential that an atmosphere be created where the athletes find the

practices to be exciting and yet maintains an intense practice regimen that will enhance sport performance. An optimal balance between over stimulation and under stimulation should be determined in order to create the ideal practice as far as challenge is concerned. A few ideas that coaches may consider in creating a fun environment is varying the practice styles, so that they do not become monotonous. There are a wide variety of drills and sets that can be incorporated within practice to mix it up. This could simply be varying sets done at practice, doing a challenge set, relays, or playing a game.

The use of goal setting in a practice and meet setting is another activity used for burnout prevention. Goal setting allows the athlete to think about what they want to achieve in the upcoming practice, meet or season (Lunney, Raedeke & Venables, 2002). Sharing these goals with teammates is a good way to hold each other accountable during practice and provide words of encouragement.

Coaches should also encourage their swimmers to get involved in other sports and activities at an early age. It is those swimmers that are solely involved in swimming that are more likely to get burnt out (Lunney, Raedeke, & Venables, 2002). Coaches and parents need to reiterate that swimming is only a small part of their life. Those swimmers that obsess about making every practice are more at risk to burning out than those that do not place that same level of importance on perfect attendance (Lunney, Raedeke, & Venables, 2002). Coaches believe that a long-term focus is beneficial in preventing burnout. They want changes that are gradual and over a long period of time opposed to dramatic time drops (Lunney, Raedeke, & Venables, 2002).

The quality versus quantity of training is essential in the sport of swimming; doing too much too soon can lead to burnout. Another option that aids in the prevention of burnout is allowing the athlete to make choices. This gives the athlete a sense of control and makes them feel as they have control of the outcomes. It can be anything as simple as letting them choose a set to letting the swimmers decide what they swim at the next meet (Weiss, 2008).

While the previous suggestions are focused on preventing burnout, there are treatments for burnout that may be implemented if a swimmer is suspected of burnout. One treatment plan is to develop a program which will alleviate staleness. This program may include: relaxation techniques, imagery, goal setting and self-talk strategies (Weiss, 2008). These methods are used to attempt to reprogram the athlete and instill a desire to compete again. As a last resort, the athlete should be removed from the situation for a set period of time (Weiss, 2008). This course of action is taken when the athlete is having difficulty sleeping, eating and at times, depression may be present (Weiss, 2008).

LIMITATIONS

There are several limitations that should be noted concerning this research study. First, the sample size ($n=89$) was relatively small, so the results may have not shown the true nature of the effects. A larger sample size may help when performing an independent-samples t test and calculating the means and standard deviations. This is especially true when comparing the means of two groups when one of the groups is larger than the other. In order for the independent-samples t test to find a significant difference when there was a large difference in sample sizes, the difference between the means must be quite large. Another potential

limitation of this research study was that all swimmers were from schools in the Midwest. The geographical region in which the swimmer attends school may have an effect on their perception of reduced sense of accomplishment, emotional/physical exhaustion and devaluation. Individuals from the Midwest are often stereotyped as extremely hard workers whereas; this is not necessarily the case throughout the nation. Another potential limitation with this research study was the part of the swimmer's season when the questionnaires were completed. In this study, the questionnaires were completed towards the end of the season for Division I and Division II swimmers. For Division III swimmers, the surveys were distributed a week after the conclusion of their season. A swimmer may have a different mindset before the conclusion of the season than after the season is finished. It would be interesting to distribute the survey during the beginning, middle, and end of the season and see if the time of the season had an effect on the burnout symptoms. Also, the questionnaires were completed following the conclusion of a swim meet. The responses obtained from the swimmers may have been influenced by the results of the swim meet and how the swimmer individually performed.

FUTURE DIRECTIONS

This research study could be expanded upon by recruiting more participants throughout the county. Male collegiate swimmers could also be studied to see if males perceive their scholarships differently than females. Another direction this research could follow is looking at the amount of scholarship money that the swimmer receives and analyzing that data to see if the amount a swimmer receives influences how the swimmer perceives the scholarship. Future researchers may want to include a questionnaire pertaining to intrinsic and extrinsic

motivation, since the results indicate that burnout is influenced by the athlete's perception and motivation. Another direction would be to look at burnout symptoms over the course of the swim season. Research has been done similar to this in the sport of rugby (Cresswell & Eklund, 2005b) but the structures of these two sports are quite different.

CONCLUSION

Burnout continues to be a serious issue that needs to be dealt with in the world of sports. It is on the rise and is especially a concern in the sport of swimming. The data collected from this research study indicate that the scholarship status of a swimmer did lead to higher burnout scores on the emotional/physical exhaustion subscale. A scholarship is a form of extrinsic motivation which may ultimately decrease an athlete's intrinsic motivation. The degree to which this occurs appears to depend on how the athlete perceives the scholarship. A swimmer that views the scholarship as an opportunity to enhance her education or as an accomplishment is less likely to experience burnout symptoms. Whereas, a swimmer that swims solely for the scholarship will be more likely to display a multitude of symptoms pertaining to burnout. While burnout is problematic, there are actions that can be taken to prevent burnout and there are treatments to cure it.

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APPENDIX A

Swimmer Demographic Information Sheet

Please respond to following questions to the best of your ability. Circle the answer that best applies. Do not write your name or any other identifying information on this piece of paper. All information obtained from this study will stay anonymous.

Age: 18 19 20 21 22 23 or older

How many years have you been swimming in college?

1 2 3 4 more than 4

What division is the university in which you attend? (Division I, II, III)

Division I Division II Division III

If attending a DI or DII university, are you on athletic scholarship?

Yes

No

Number of years swimming competitively:

1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 or more

Average number of hours of practice per week (swimming, weights, dry-land, running, etc...)

1-5 6-10 11-15 16-20 more than 20

Average number of hours per week spent completing swimming related obligations (team meetings, team activities, volunteering, training room, study tables, etc...)—DO NOT include traveling & practice

1-5 6-10 11-15 16-20 21-25 more than 25

Average Weekly Yardage:

< 25,000 25,000 30,000 35,000 40,000 45,000 50,000 55,000 60,000 65,000
70,000

Do you swim competitively during the summer (compete in meets & train with a team on a regular basis)?

Yes No

How many months out of the year do you competitively swim?

6 or less 7 8 9 10 11 12

How many months out of the year do you swim more than 3 times a week?

6 or less 7 8 9 10 11 12

Approximately how many meets have you competed in during the last 12 months?

0-5 6-8 9-12 13-15 16-20 more than 20

What individual events do you normally compete in at the collegiate level?

(Circle all that apply)

50 free 100 free 200 free 500 free 1000/1650 free 100 back

200 back 100 breast 200 breast 100 fly 200 fly 200 IM 400 IM

APPENDIX B

Athletic Questionnaire

Directions: A number of statements that swimmers have used to describe their feelings about swimming are given below. For each question, please indicate the degree to which you are experiencing each feeling now, at this point in time using the scale below.

1	2	3	4	5
almost never	rarely	sometimes	frequently	almost always

_____ 1. I'm accomplishing many worthwhile things in swimming

_____ 2. I feel so tired from my training that I have trouble finding energy to do other things

_____ 3. The effort I spend in swimming would be better spent doing other things

- _____ 4. I feel overly tired from my swimming participation
- _____ 5. I am not achieving much in swimming
- _____ 6. I don't care as much about my swimming performance as I used to
- _____ 7. I am not performing up to my ability in swimming
- _____ 8. I feel "wiped out" from swimming
- _____ 9. I'm not into swimming like I used to be
- _____ 10. I feel physically worn out from swimming
- _____ 11. I feel less concerned about being successful in swimming than I used to
- _____ 12. I am exhausted by the mental and physical demands of swimming
- _____ 13. It seems that no matter what I do, I don't perform as well as I should
- _____ 14. I feel successful at swimming
- _____ 15. I have negative feelings toward swimming

Why are you currently swimming?

Thank you for taking the survey

APPENDIX C

_____ Coaching Staff,

My name is Kelly Mateas and I am currently an undergraduate student at the University of Northern Iowa. For my honors senior thesis, I am researching burnout symptoms in scholarship and non-scholarship female college. Minimal research has been done on the topic of burnout, especially as it concerns to scholarship and non-scholarship athletes. Burnout is becoming an emerging concern in the world of sports. From conducting my research on female

college swimmers, I hope to examine the potential differences in burnout symptoms between scholarship and non-scholarship female college swimmers.

If you agree to let your swimmers participate, your swimmers will need to sign a consent form. Once consent is obtained, the swimmers will be asked to complete an Athletic Burnout Questionnaire, which consists of 15 statements dealing with burnout. An example of a statement is: "I'm accomplishing many worthwhile things in swimming." The swimmer will answer with the degree to which the statement applies to them. Along with this questionnaire, I would also ask the swimmers to complete a demographic questionnaire. From these questions, analysis of burnout symptoms involving scholarship and non-scholarship swimmers will be assessed.

If you decide to let your swimmers participate in this research study, this can be accomplished when your team swims against UNI. I was hoping that your swimmers could complete the questionnaires after the conclusion of the swim meet. It should take no more than 10 minutes of your team's time. If you decide to allow me to conduct my research with your swim team, I would need to obtain a letter of support from you. This can simply be an email from your university account that says that you are willing to let me recruit your swimmers.

If you decide to participate, as a thank you, I will share the results I obtain with you, your staff and your athletes. However, the results will be generalized, not specific to just your program. If you have any questions or concerns, please feel free to contact me either by phone (630-421-1693) or by email (kmateas@uni.edu). Thank you for your time and your help is greatly appreciated.

Sincerely,

Kelly Mateas

Undergraduate Student in Movement and Exercise Science

University of Northern Iowa

Cedar Falls, IA

APPENDIX D

UNIVERSITY OF NORTHERN IOWA HUMAN PARTICIPANTS REVIEW

INFORMED CONSENT

Project Title: Burnout symptoms in scholarship and non-scholarship female college swimmers

Name of Investigator: Kelly Mateas

Invitation to Participate: You are being invited to participate in a research study conducted through the University of Northern Iowa. It required by the university that you sign the consent form in order to participate in this study. The information that follows is given in order to assist you in making an informed decision about whether or not you would like to participate in this study.

Nature and Purpose: This research study is designed to examine potential differences in the number of burnout symptoms between scholarship and non-scholarship swimmers. The study is designed to discover whether the number of years that an individual has been swimming impacts the type of symptoms they show and if the events in which swimmers' compete/train have an effect on burnout. It is also designed to determine if the volume of training and the intensity level have an effect on burnout. Lastly, the study will look at the reasons that keep a burnt out swimmer from quitting.

Explanation of Procedures: You will be handed a manila envelope, which will be passed out by the primary investigator or faculty advisor. This envelope will contain the Athletic Burnout Questionnaire (ABQ) and a demographic information sheet. The ABQ contains 15 statements that cover three subscales of burnout, which are reduced sense of accomplishment, emotional/physical exhaustion, and devaluation. You will respond with the degree to which the statement applies to yourself. The scale goes from 1 to 5 with 1 being almost never and 5 standing for almost always. All responses will remain confidential. It should take you no more than 10 minutes to complete the demographic information sheet and to complete the ABQ. Upon completion, both of these questionnaires should be placed inside the manila envelope and returned to the individual that administered them.

Discomfort and Risks: Burnout is not a topic openly discussed in the world of sports so there is a slight chance that discomfort may occur from taking the survey and completing the questionnaire. It might have a psychological effect on you. It may cause you to start thinking about burnout or it may confirm a conception that you may have about being burnt out.

My name is Kelly Mateas and I am currently an undergraduate student at the University of Northern Iowa. For my honors senior thesis, I am researching burnout symptoms in scholarship and non-scholarship female college swimmers. From my research, I hope to examine the potential differences in burnout symptoms between scholarship and non-scholarship female college swimmers. You are being invited to participate in this research study conducted through the University of Northern Iowa. If you agree to participate, please complete the following surveys attached to this email and return it to myself at kmateas@uni.edu

Attached to this email are the Athletic Burnout Questionnaire (ABQ) and a demographic information sheet. The ABQ contains 15 statements that cover three subscales of burnout and you will respond with the degree to which the statement applies to yourself. All responses will remain confidential. It should take you no more than 10 minutes to complete both the demographic information sheet and the ABQ. Upon completion, both of these questionnaires should be emailed to kmateas@uni.edu as an attachment.

Burnout is not a topic openly discussed in the world of sports, so there is a slight chance that discomfort may occur from taking the survey and completing the questionnaire. There are no direct benefits for participation in this research study and any information gathered during this research study that could be linked to you will be kept confidential. Participation in this research study is completely voluntary. You may refuse to participate or may discontinue participation at any time during the project without penalty or loss of benefits to which you are otherwise entitled.

If you have any questions or concerns pertaining to this research study, please feel free to contact me at (kmateas@uni.edu). Thank you for your time and your help is greatly appreciated.

Sincerely,

Kelly Mateas

Undergraduate Student in Movement and Exercise Science

University of Northern Iowa

Cedar Falls, IA