The Impact of Social Media on Athletes’ Self-Efficacy

Elyse Gorrell, B.S.M. (Honours)

Submitted in partial fulfillment of the requirements for the degree of

Master of Arts in Applied Health Science

Health and Physical Education

Faculty of Applied Health Sciences

Brock University

St. Catharines, Ontario

© August 2018
Abstract

The purpose of the study is to understand how social media affects athletes’ self-efficacy. With the ubiquitous presence of social media, it was hypothesized that via social media the source persuasion — one of the four sources that regulates self-efficacy — may be used as a way to encourage or discourage athletes in believing they have, or lack, the skills necessary to complete a task; therefore, persuading athletes to become more or less assured in their abilities despite past experiences. A phenomenological approach was utilized for this study to assist the researcher in conceptualizing ideas that might be dismissed by the boundaries of more traditional approaches. Semi-structured interviews were completed with 10 high-performance athletes in combative sports, and a cross-interview by-question analysis was performed on the data to determine the patterns and themes from the data. Results indicate that social media, and the way that athletes use social media, does have an effect on athletes’ self-efficacy, however the impact of self-efficacy depends on the social media usage.
Acknowledgements

This thesis was completed with the help from many individuals. I am grateful to have so many positive influences in my life. I realize many people do not have the opportunity or support to follow their interests while balancing other aspects of their life. I am lucky that the things that do crossover not only complement each other but allow me to succeed as well. I’m feeling pretty good about the personal growth that I’ve had through my Master’s degree — hopefully it continues. Life is a funny thing where everything kind of falls into place; here is some overdue appreciation and reflection:

Thank you, Philip Sullivan, for taking a chance on me as a Master student. By recognizing how passionate I am about sport psychology and setting up sessions and programs to help benefit me and my peers it has helped me gain much more experience while helping athletes. To me, I have gotten more out of these 3 years than just a degree. I also will always appreciate the guidance towards qualitative research, something that may not have been in your element, but it was something you recognized would benefit me and my research. I’m also grateful to be surrounded by a talented group of individuals who are also passionate about sport psychology and athlete performance.

Thank you, Maureen Connolly, for introducing me to the world of Phenomenology, and teaching me how powerful words are. You did not have to, but you always took time out of your day for my random pop-by’s and rants about culture in sport. I am very much looking forward to working with you in the next phase, and the more interesting conversations to come.

Thank you, Jennifer and George Gorrell (mom and dad), for the unconditional love and support in my journey to becoming the smartest Gorrell on paper — as well as
encouraging me to kick and punch people for as long as I have (inside a sport context).
Once again proving you both put what is best for your children before yourselves. I strive
to succeed because of the inspiration that the two of you have always provided me. Pat,
Neale, and Dani you guys keep me grounded. I’m proud to be succeeding alongside of all
of you.

Thank you, United Family Martial Arts, for keeping me mostly sane. Training
with the organization has allowed me to continue to compete and succeed in sport karate
at a competitive level. I respect and admire any positive community that is involved in
sport, and this particular community has always been welcoming and supportive of me
through the sport. The best compliment is when people support and take interest in your
life. An honourable mention to Trevor Nash whose perspectives and philosophical
debates with me always had something to offer.
Table of Contents

Chapter 1: Review of the Literature ................................................................. 1
  Social Media ............................................................................................... 2
  Two-Way Conversation .............................................................................. 4
  Social Cognitive Theory ............................................................................. 5
  Self-Regulation ......................................................................................... 6
  Self-Efficacy ............................................................................................... 6
    Mastery Experiences ................................................................................ 7
    Vicarious Experiences ............................................................................. 9
    Physiological and Affective States .......................................................... 10
  Verbal Persuasion ...................................................................................... 11
    Social Media and Verbal Persuasion ....................................................... 12
  Literature Review of Persuasion ............................................................... 12
    Motor Tasks .............................................................................................. 14
    Cognitive Tasks ....................................................................................... 15
    Participating in Persuasion ..................................................................... 17
  Operationalization of Persuasion ............................................................... 18
  Social Media and Athletes ........................................................................ 19
    Organization-Athletes Dynamic ............................................................. 20
    Fan-Athlete Dynamic ............................................................................. 21
  A Posteriori ................................................................................................. 23
    Social Media: Natives and Immigrants ................................................... 23
    FoMO ...................................................................................................... 23
  Gap in Research ......................................................................................... 25
    Uses and Gratifications .......................................................................... 27
    Social Media in Self-Efficacy Appraisal ................................................ 27

Chapter Two: Rationale, Purpose, and Hypothesis ...................................... 30
  Rationale .................................................................................................... 30
  Delimitations/Limitations, Purpose, and Hypothesis ................................. 32

Chapter Three: Methodology and Methods ................................................. 35
  Procedure .................................................................................................. 36
  Data Collection .......................................................................................... 37
    Participants ............................................................................................. 37
    Sport Inclusion ....................................................................................... 37
    Interview .................................................................................................. 38
    Data Management ................................................................................... 39
  Data Analysis ............................................................................................. 39
  Trustworthiness and Triangulation ............................................................ 40

Chapter Four: Findings .................................................................................. 42
  Levels of Data Analysis ............................................................................ 42
    Phase 1 — Within Data Analysis; Reading for the Whole, Salience, and Pattern ... 42
      Participant 1 ......................................................................................... 42
      Salience ............................................................................................... 43
      Pattern ................................................................................................. 44
      Participant 2 ........................................................................................ 44
Phase 2 — Across Data Analysis; Cross Interview By-Question .............................. 62
Opening Question ....................................................................................... 63
Salience ...................................................................................................... 63
Pattern ........................................................................................................ 63
Cluster 1: Identifying What Level of Sport They Are, and Judgement About
Opponents and Abilities ............................................................................... 63
Question 1 ................................................................................................. 64
Salience ...................................................................................................... 64
Pattern ........................................................................................................ 64
Question 2 ................................................................................................. 64
Salience ...................................................................................................... 64
Pattern ........................................................................................................ 64
Question 3 ................................................................................................. 64
Salience ...................................................................................................... 64
Pattern ........................................................................................................ 64
Question 4 ................................................................................................. 64
Salience ...................................................................................................... 64
Pattern ........................................................................................................ 64
Question 5 ................................................................................................. 65
Salience ...................................................................................................... 65
Pattern ................................................................. 65
Question 6 .............................................................. 65
Salience ................................................................. 65
Pattern ................................................................. 65
Question 7 .............................................................. 65
Salience ................................................................. 65
Pattern ................................................................. 65
Question 8 .............................................................. 65
Salience ................................................................. 65
Pattern ................................................................. 65
Question 9 .............................................................. 65
Salience ................................................................. 65
Pattern ................................................................. 65
Question 10 ............................................................ 66
Salience ................................................................. 66
Pattern ................................................................. 66
Question 11 ............................................................ 67
Salience ................................................................. 67
Pattern ................................................................. 67
Cluster 1, Alternative Answers: IF They Think They Are the Best Athlete .......... 67
Question 6 .............................................................. 67
Salience ................................................................. 67
Pattern ................................................................. 67
Question 7 .............................................................. 67
Salience ................................................................. 67
Pattern ................................................................. 67
Question 8 .............................................................. 67
Salience ................................................................. 67
Pattern ................................................................. 67
Cluster 2: Their Use/Opinion on Social Media ............................................. 67
Question 1 .............................................................. 67
Salience ................................................................. 68
Pattern ................................................................. 68
Question 2 .............................................................. 68
Salience ................................................................. 68
Pattern ................................................................. 68
Question 3/4 ........................................................... 68
Salience ................................................................. 68
Pattern ................................................................. 68
Question 5 .............................................................. 68
Salience ................................................................. 68
Pattern ................................................................. 68
Question 6 .............................................................. 69
Salience ................................................................. 69
Pattern ................................................................. 69
Question 7 .............................................................. 69
Salience ................................................................. 69
Pattern ................................................................. 69
Question 8 .............................................................. 69
Social Media and Athletes’ Self-Efficacy

Cluster 3: Sport Specific Social Media

Question 1
Salience ................................................................. 70
Pattern ................................................................. 70
Question 2
Salience ................................................................. 70
Pattern ................................................................. 70
Question 3
Salience ................................................................. 71
Pattern ................................................................. 71
Question 4
Salience ................................................................. 71
Pattern ................................................................. 71
Question 5/6
Salience ................................................................. 71
Pattern ................................................................. 71
Question 7
Salience ................................................................. 71
Pattern ................................................................. 72
Question 8/9
Salience ................................................................. 72
Pattern ................................................................. 72
Question 10
Salience ................................................................. 72
Pattern ................................................................. 72
Question 11
Salience ................................................................. 72
Pattern ................................................................. 73
Question 12
Salience ................................................................. 73
Pattern ................................................................. 73
Question 13
Salience ................................................................. 73
Pattern ................................................................. 74
Question 14
Salience ................................................................. 74
Pattern ................................................................. 74
Question 15
Salience ................................................................. 74
Pattern ................................................................. 74
Question 16
Salience ................................................................. 74
Pattern ................................................................. 75

Phase 3 — Separating By-Question and Body, Space, Time, and Relation Patterns 75
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body, Space, Time, and Relation Chart</td>
<td>76</td>
</tr>
<tr>
<td>Chapter Five: Discussion</td>
<td>81</td>
</tr>
<tr>
<td>Body</td>
<td>82</td>
</tr>
<tr>
<td>Gender</td>
<td>82</td>
</tr>
<tr>
<td>Skill</td>
<td>82</td>
</tr>
<tr>
<td>Personality</td>
<td>83</td>
</tr>
<tr>
<td>Felt Sense</td>
<td>84</td>
</tr>
<tr>
<td>Face-to-Face Interactions</td>
<td>85</td>
</tr>
<tr>
<td>Moral Dilemma</td>
<td>85</td>
</tr>
<tr>
<td>Identity</td>
<td>85</td>
</tr>
<tr>
<td>Self-Presentation</td>
<td>86</td>
</tr>
<tr>
<td>Relation</td>
<td>86</td>
</tr>
<tr>
<td>Boost Confidence</td>
<td>86</td>
</tr>
<tr>
<td>Social Dynamics</td>
<td>88</td>
</tr>
<tr>
<td>Mindfuckery</td>
<td>88</td>
</tr>
<tr>
<td>Results vs Perceived Results</td>
<td>89</td>
</tr>
<tr>
<td>The Source Matter</td>
<td>90</td>
</tr>
<tr>
<td>Identity (Perceiving the Other)</td>
<td>90</td>
</tr>
<tr>
<td>Coach Perspective: Hardwork vs Talent</td>
<td>91</td>
</tr>
<tr>
<td>Space</td>
<td>92</td>
</tr>
<tr>
<td>Two Different Spaces: The real and the not real</td>
<td>92</td>
</tr>
<tr>
<td>Rather be somewhere else</td>
<td>92</td>
</tr>
<tr>
<td>Results</td>
<td>93</td>
</tr>
<tr>
<td>Time</td>
<td>93</td>
</tr>
<tr>
<td>Generalized Time</td>
<td>94</td>
</tr>
<tr>
<td>Not Enough Time</td>
<td>94</td>
</tr>
<tr>
<td>Having Too Much Time</td>
<td>94</td>
</tr>
<tr>
<td>Unaware of Time</td>
<td>94</td>
</tr>
<tr>
<td>FoMO</td>
<td>94</td>
</tr>
<tr>
<td>Regretting Time Use</td>
<td>95</td>
</tr>
<tr>
<td>Timing of Posts: Time leading up to tournament</td>
<td>96</td>
</tr>
<tr>
<td>Social Media as an Environmental Factor</td>
<td>96</td>
</tr>
<tr>
<td>Body</td>
<td>97</td>
</tr>
<tr>
<td>Age</td>
<td>97</td>
</tr>
<tr>
<td>Routine Based Use</td>
<td>98</td>
</tr>
<tr>
<td>Use and Gratification Theory</td>
<td>99</td>
</tr>
<tr>
<td>Relation</td>
<td>99</td>
</tr>
<tr>
<td>Different than Trash-Talk</td>
<td>100</td>
</tr>
<tr>
<td>Function/Dysfunction</td>
<td>100</td>
</tr>
<tr>
<td>Monitoring Leads to Self-Comparison</td>
<td>100</td>
</tr>
<tr>
<td>Monitoring People for Beneficial Reasons</td>
<td>101</td>
</tr>
<tr>
<td>Social Media Use in Relation to Others</td>
<td>102</td>
</tr>
<tr>
<td>Social Media in Relation to Business</td>
<td>102</td>
</tr>
<tr>
<td>Use and Gratification Theory</td>
<td>102</td>
</tr>
<tr>
<td>Space</td>
<td>103</td>
</tr>
<tr>
<td>Host to Sporting Community</td>
<td>103</td>
</tr>
<tr>
<td>Interaction with People is Different in Real/Not Real Space</td>
<td>104</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Distance ....................................................................</td>
<td>104</td>
</tr>
<tr>
<td>Function/Dysfunction .............................................</td>
<td>105</td>
</tr>
<tr>
<td>Marketing Self ..........................................................</td>
<td>105</td>
</tr>
<tr>
<td>Connection with People with Few Physical Boundaries ........</td>
<td>106</td>
</tr>
<tr>
<td>Not Posting ..................................................................</td>
<td>106</td>
</tr>
<tr>
<td>Computer vs Phone ....................................................</td>
<td>106</td>
</tr>
<tr>
<td>Use and Gratification Theory .......................................</td>
<td>106</td>
</tr>
<tr>
<td>Time ...........................................................................</td>
<td>107</td>
</tr>
<tr>
<td>Planning Future Experiences .......................................</td>
<td>107</td>
</tr>
<tr>
<td>Time Function/Dysfunction .........................................</td>
<td>108</td>
</tr>
<tr>
<td>Use and Gratification Theory .......................................</td>
<td>108</td>
</tr>
<tr>
<td>Implications ..................................................................</td>
<td>109</td>
</tr>
<tr>
<td>Recommendations for Future Research .............................</td>
<td>111</td>
</tr>
<tr>
<td>References ....................................................................</td>
<td>114</td>
</tr>
<tr>
<td>Appendix A .................................................................</td>
<td>123</td>
</tr>
<tr>
<td>Appendix B .................................................................</td>
<td>126</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1 .................................................................................................................. 8
Figure 2 .................................................................................................................. 26
Chapter 1: Review of the Literature

While athletes typically provide the harshest critique of their own performance, most of the time, performance is not black and white — like win and lose — an athlete can lose but still exceed performance expectations, and vice versa. Self-efficacy has an impact on the way that an athlete can interpret their future performances; this can be achieved through past experience, the people that the athlete compares himself or herself to, the way the athlete physically and emotionally feels, and the things that are being said to the athlete and by whom. The outcome of a performance assists in assessing the athlete’s perception of their ability; however, opponents and the way that they perform also influence an athlete’s perception of ability. This is similar to the metaphor of how a big fish in a small pond will always believe they are the biggest fish, until they move to a bigger pond. Social media has made that pond much bigger, or at least less transparent. Presently, social media has become an important venue to connect opponents who may not otherwise be connected. However, social media can issue a unique experience to each user, as it can be utilized to provide misleading information about the self to others. Consequently, social media contains an element of persuasion, where a person can choose what to post to frame their profile. Athletes, and their opponents, can choose how to frame their athletic identity, possibly promoting a falsehood of their ability that other athletes can compare themselves to. Due to the false information that is sometimes posted on social media, there is the likelihood that athletes can begin to be persuaded that their own ability is less than their opponents’. Given the somewhat under explored complexities of social media and its effects and/or influences on athletes, the present
study is attempting to understand the impact that social media has on athletes’ self-efficacy.

A phenomenological approach was used for the study. During the initial stages of the investigation there was a reliance on Social Cognitive Theory (SCT) to guide the research. However, due to the generative qualities of qualitative research, the analysis led to the Use and Gratification Theory that helped guide the findings and discussion portion of the study. Although the findings remained consistent with the original purpose of the study, the phenomenological analysis findings emphasized how the habitual use of social media led to the overall gratification of the athlete. Consequently, the metacognitive habitual use of social media determined the effect that social media had on an athlete’s self-efficacy. Within the phenomenological method, the existential lifeworld categories of body, space, time, and relation (bstr) approach were utilized to distinguish salience and pattern that assisted in understanding the athletes’ experiences with and around social media.

**Social Media**

With the development of social media, ways of communication are consistently evolving. People no longer have to express themselves through face-to-face interactions. Social media refers to internet-based software and websites that promote the participation of sharing personal content and communicating with others on a broader scale (Kaplan & Haenlein, 2010). Since the late twentieth century, social media has made it so that information can be instant and everywhere. It has become nearly impossible to avoid using social media, since it is a new way of receiving and broadcasting information. If a person chooses not to use it, it becomes difficult to receive information and one can
easily become left out or left behind; it has become convenient to have. Social Media platforms include, but are not limited to, social networking sites like Facebook, photo sharing sites, like Instagram and Snapchat, video sharing sites like YouTube, micro blogging sites like Twitter, and networking sites like LinkedIn. Any person who has access to internet is able to use these sites as the sites are inexpensive, and in many cases, completely free.

Social media has quickly become ubiquitous, and has torn down barriers of communication between local, national, and international communities. Social media has had a continuous growth over the past decade. In 2005, only 7 percent of American Adults (age 18+) used social media, however in 2015 it was documented that nearly 65 percent of American adults had used social media (Perrin, 2015). This may be due partly to that smartphone use has also grown since 2005 — in 2015 64 percent of American adults own a smartphone (Smith, 2015) — and that social media has adapted to apps, making social media even more accessible than ever before.

These barriers have also been broken down in the sport community and may affect the way competitors present themselves and interact with each other. One of the most prevalent use of social media in sport was in 2010 when LeBron James revealed he was leaving the Cleveland Cavaliers to join the Miami Heat. On July 6, 2010, James opened a Twitter account and within an hour received nearly 18,000 followers, without posting anything (Withers, 2010). James publicly announced his decision to sign with the Miami Heat on July 8, 2010, during a 1-hour ESPN broadcast titled “The Decision”, where 10 million viewers tuned in to watch (Sanderson, 2011). On the morning of the broadcast, James created anticipation for the event by posting that people could send him
questions about his decision through Twitter. Through social media, James demonstrated how athletes could be directly involved in media production, by taking control of his image and becoming closer with fans by integrating them into his media messages.

**Two-Way Conversation.** One of the benefits of social media is that it has created a two-way conversation that was not previously there. Social media has broken barriers in communication concerning what is being communicated, who is communicating it, and to whom is being communicated to. This is impactful in a few ways. For instance, athletes at the elite and professional level have always had to deal with being in the media. That is, framing their public image, dealing with the public before and after performances, and seeing the same done to their opponents. At a certain level, media exposure becomes involuntary; a one-way conversation where the material only provides the information. Yet, the media is necessary to broadcast information, especially for global events, because of the demand from consumers who want to be updated and know what is going on in the world. For the athlete, however, the media takes focus off of the goal — winning, etc. — and increases performance pressure. As a result, the media wants to broadcast a story with little consideration for the effect that it may have on the preparation or performance of the athletes (Kristiansen, Hanstad, & Roberts, 2011). Arguably, it is part of an elite/professional athlete’s job to address and be portrayed in the media, and elite athletes are required to learn a variety of coping strategies to deal with the stress that the media creates (Nicholls & Polman, 2007). Social media, however, allows athletes at all levels to portray themselves and their abilities to a broader community. Ergo, with the emergence of social media athletes have more control over their image and can frame their skill and performance accomplishments how they want.
But it also allows two-way conversation between material and receiver. Communication becomes much more fluent and instant.

**Social Cognitive Theory**

Social Cognitive Theory (SCT) describes the factors that influence and determine human behaviour. SCT explains that human functioning and motivation is the result of the dynamic relationship where behaviour, personal, and environmental factors all influence and interact with each other. The way that the three factors interact with each other addresses how people are not driven by internal forces, or shaped and controlled by their external environment (Bandura, 1986), but are actively engaged in their own development. The way that people interpret their behaviour, influences and adjusts personal factors they possess and their environment (Mack, Sabiston, McDonough, Wilson, & Paskevich, 2016). Motivation is also an important component that results from the three factors interacting and affecting each other, and there are several behavioural constructs that help with understanding motivation; a few of these constructs included observational learning, goals, and outcome expectancies.

Each construct of SCT influence and direct behaviour differently. Observational learning helps individuals learn and acquire behaviour by watching the actions and outcomes of others, allowing the individual to learn without having to do the behaviour (Mack, et al., 2016). Goals help direct behaviour with objectives that have been set by the individual (Mack, et al., 2016). Short and long-term goals help motivate and guide a person’s effort or allow the person to compare current skill to goal attainment. Outcome expectancies direct behaviour if a person decides an outcome is valuable or not. When deciding to participate in a behaviour, an individual will consider what might be gained
or lost in consequence; if the pros outweigh the cons, the behaviour is more likely (Mack, et al., 2016). Self-regulation and self-efficacy are constructs that are also embedded within SCT.

**Self-Regulation.** Self-regulation is the ability to monitor and control thoughts, emotions, and actions by the standards and beliefs a person holds (Bandura, 1986). Therefore, self-regulation mediates the effects of most external events, as well as influences motivation and behaviour. If behaviour was purely regulated by external outcomes, beliefs would constantly be shifting to adhere with every moment that affected it (Bandura, 1991). People, however, possess self-reflective and self-reactive capabilities that assist in controlling thoughts, feelings, and motivations of their actions (Bandura, 1991). As such, if a goal is set, an individual would be able to make decisions to adjust his or her goal based on the monitored progress. Once the goal has been achieved, the individual is able to reflect on the experience and learn from the factors that helped or hindered the success.

**Self-Efficacy**

Bandura’s construct of self-efficacy has been used extensively throughout research. Self-efficacy, as Bandura (1986) states, is a person’s judgment of his or her own abilities to complete a task. It was developed within SCT and was originally proposed because of the results it achieved when applied to anxiety. Self-efficacy is a cognitive tool that mediates people’s motivation and behaviour (Feltz, 1988). There are four sources to self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. These four sources are how a person configures and readjusts his or her self-efficacy beliefs. Through the appraisal of self-efficacy, a
person’s outcome expectancy is predicted for any situation that is encountered; it is situation specific and adjusts according to degree of interrelatedness and informativeness. That is, how relevant is the source of efficacy to a person, and what he or she chooses to acknowledge when determining his or her own ability. The beliefs in efficacy are reflected in the behaviour that the person demonstrates, such as their goals, the effort that is expended, and resiliency in the face of adversity (Feltz, Short, & Sullivan, 2008). These beliefs influence all aspects of performance, including thought patterns and emotional reactions as well as behaviour. Figure 1 demonstrates the sources of efficacy and how they impact efficacy outcomes and judgments.

**Mastery Experiences.** Mastery experiences are the makeup of a person’s past experiences and affect self-efficacy judgements through cognitive processing and self-regulating sub-skills (Bandura, 1997). People perform better if they have the belief that they can produce what is necessary to perform (Bandura, 1997). Mastery experiences are indicators of capability and are the most influential type of efficacy (Bandura, 1997). Mastery experiences, through self-regulation, are reassessed depending on what the performance requires, which are based upon the assumption of ability, the perceived difficulty of the task, the amount of effort required, how much external aid received, the situation under which the performance occurred, the ever-changing pattern of success and failure in performance, and the way that experience was cognitively organized and reconstructed in memory (Bandura, 1997).
Having the knowledge and skills to succeed does not necessarily produce successful performances, especially if a person lacks the confidence to use them well. An athlete who experiences failure, but is not used to it, may be discouraged more easily than someone who has experienced failure. Conversely, if a person is convinced in their ability to succeed, they may persevere despite the failure. People who are self-assured in their efficacy will continue to believe in their capabilities after a similar success, while people who doubt their ability will view a success, possibly irregular to them, as proof of their hard work instead of evidence of their capability (Alden, 1987).

It is expected that success builds a better belief in self-efficacy while failure impairs it, especially if the incident occurs early in efficacy appraisal. Once efficacy has been established in an individual, it can be generalized to other situations. Efficacy
beliefs can therefore be transferred to similar situations as well as activities that are substantially different from the ones that efficacy was created from (Bandura, 1977). People tend to participate in activities if they have some kind of knowledge of their capability within the task. People seek trends in their performances that are governed by redundant, self-assuring, task outcomes. The information derived from redundant information does not reveal anything new for self-efficacy appraisal, but only assures the person of his or her efficacy.

**Vicarious Experiences.** Vicarious experience is the modelled behaviour that is associated with the development and change in self-efficacy (Bandura, 1997). Vicarious experiences assist to re-appraise self-efficacy through the transmission of competencies and comparisons to other people (Bandura, 1997). When a new task or activity arises, there are fewer experiences that a person may be able to judge their competency with. In this case, the person will judge task difficulty in comparison to similar tasks they have completed as well as the outcome of others when they performed the task. It is argued that vicarious experiences are not as strong as mastery experiences when altering efficacy beliefs, but there are many instances where vicarious experiences can override the impact of mastery experiences (Bandura, 1997); subjective experiences, where performance standard is left to interpretation, are one of these instances.

Vicarious experience uses comparative evaluation, which is an ongoing, unavoidable process, to manipulate efficacy beliefs. In a competitive sense, comparison with others who have more experience or are just viewed to have superior skill can cause self-doubting in one’s own ability, as well as other negative side effects. Even when there is evidence from mastery experiences that proves that the individual has the skill to
complete a task, if there is uncertainty in his or her efficacy belief the individual will look to a similar individual for comparison. People who are convinced of their inability, and have a lower efficacy belief, are quick to accept their personal deficiencies when they see people similar to them fail (Bandura, 1997). Although, when there is a positive influence that convinces people of their efficacy, it weakens the impact of direct failure experiences and strengthens persistence when repeated failure is encountered (Brown & Inouye, 1978; Weinberg et al., 1979).

People are continuously presented with comparative information that they use to gage their own ability and performance. They see the progress people who are in similar predicaments are making and consciously, or unconsciously, make note of it. People who are insecure about their ability avoid upward comparisons, since it is threatening to their self-esteem. Instead, they either compare themselves to people with lower skill, to make themselves look better, or with people with skill so beyond their scope that it will not cause any serious threats (Bandura, 1997). People identify better with others who are similar to them, and the greater the assumed similarity is the more a person is positively or negatively convinced of his or her own ability.

**Physiological and Affective States.** A third factor that people judge their efficacy beliefs by are their physiological and affective states. This is the somatic information — body indicators — that people exert through physical and emotional states. It is through this that people judge their capableness, strength, and vulnerability during an activity. Somatic indicators occur all the time, but they are most prevalent in situations that are stressful or challenging, such as sport performances. It also depends on where the individual’s attention is focused on.
Attention is limited, and there are only a few things a person can focus on at once (Kahneman, 1973). A person cannot be focused on internal and external cues at the same time. As a result, an individual who is more prone to focus inwardly, or is less absorbed in the activities around him or her, are more likely to notice, and possibly dwell on, somatic indicators (Pennebaker & Lightner, 1980). The way a person reacts to their somatic indicators also depends on the way that they interpret them. For instance, feeling “nervous” to one person may be feeling “excited” for another. Therefore, as Bandura (1977) suggests, the emotions that a person experiences through situations of (eu)stress affect behaviour through the cognitive appraisal of the information that arousal construes. The way in which a person relates their physiological or affective states also can play a role in the way they perform. If the athlete relates the feeling of “butterflies” in his or her stomach as a negative experience, then they will be approaching their performance with a negative overtone.

**Verbal Persuasion.** Verbal persuasion is the fourth source of self-efficacy and efficacy appraisal. Verbal persuasion uses social influences, and personal coping techniques such as self-talk, to boost confidence in certain capabilities. Verbal persuasion is commonly used because of its ease and availability (Bandura, 1977). There are several techniques for verbal persuasion — feedback, positive reinforcement, trash-talking — but from what one listens to, in these techniques, depends on the credibility, prestige, trustworthiness, and expertise of the persuader (Feltz, 1988). If the athlete hears advice from a person that does not meet any of the criteria then the words may go unheard, and efficacy appraisal does not need to be adjusted. Consequently, any of the techniques need to be used with caution or it may disturb self-efficacy appraisal. Positive reinforcement,
for instance, is a tool to help athletes build their self-confidence in a skill. If positive reinforcement starts to be used excessively, in areas that do not need it, then self-efficacy beliefs could be dangerously reinforced in a positive manner. This false belief could set an athlete up for failure with high psychological consequences. Therefore, verbal persuasion must be realistic and used strategically if the persuader wants the desired effects.

**Social Media and Verbal Persuasion.** With the omnipresent element of social media there are more social interactions that are occurring through a screen. It is difficult to avoid using social media because it is a faster and more efficient way to communicate and has started to be developed into everyday lives. Although, social media is not necessarily verbal it could be used as a verbal persuasion technique to reappraise self-efficacy.

**Literature Review of Persuasion**

In efficacy appraisal, mastery experiences are the main source of information that people tend to use for efficacy judgments. There are many instances, however, where people are unable to self-regulate through their mastery experiences. Subjective performances are influenced by personal judgment of how skills are performed. It is hard for people to judge their competency when the performance outcome is subjective, since there is not a clear-cut measure of ability; people begin to judge their performance in comparison to how others perform, as well as what they are being told about their own ability. Due to the nature of sport there is habitual susceptibility for athletes to be assessed and to assess others. Sports that use judges, like gymnastics and boxing, have subjective basis to the performances. Objective performances are clearly measurable and
can help a person judge his or her skill and rate of improvement. For example, if an athlete has obtained a personal best (PB) in the 100m sprint, there is evidence — a mastery experience — that demonstrates that the 100m sprinter should be able to perform that time expectation again. Therefore, when there is an activity with no absolute measure for adequacy, people start to judge their performance in comparison to others. Subjective performances can lead a person’s judgement astray, since it is left up to the individual’s interpretation. With sport, there are many social components that may influence the way an athlete perceives his or her ability. People start to fall back on vicarious experiences for efficacy appraisal, which also depends on the person that an individual has chosen for comparison (Bandura & Jourden, 1991). When a referee becomes involved, another social influence comes into play. A referee is a social influence that controls the sport but also enforces the rules. In many instances a referee’s judgment is subjective and can contradict the perspective of the athlete. Therefore, with a referee an element of persuasion starts to determine how one views their ability in certain aspects of the sport.

Subjective performances have been examined in studies to understand how people’s behaviour is regulated. Newman and Goldfried (1987) investigated the effectiveness of verbal persuasion and behavioural performance strategies, separately and in combination, in appraising self-efficacy expectations. The study used 48 undergraduate male participants who took part in role playing situations that simulated “first meetings” with a female. The study used deception, since the females were members of the study. The males were given predetermined verbal and numerical ratings that demonstrated that they performed poorly in making good first impressions. The study found that when there was much subjectivity to judge one’s performance, false information that is provided by
others can create low sense of efficacy, despite previous repeated performance attainments that could be an indicate of the person’s capabilities. Therefore, to understand the nature of the task it becomes important to recognize how persuasion is processed. The following sections will review the literature on verbal persuasion, and different techniques that verbal persuasion utilizes, to demonstrate how verbal persuasion is processed in motor, cognitive, and other related tasks to demonstrate how it impacts the reappraisal of self-efficacy.

**Motor Tasks.** Verbal Persuasion is used extensively in kinesiology studies to understand if self-efficacy, along with techniques like feedback, influences the way in which a person completes a motor task. In Lamarche, Gionfriddo, Cline, Gammage, and Adkin’s (2015) study, verbal persuasion was used to examine the impact of changes in balance efficacy on perceived and actual balance in healthy young adults. Participants were provided with “good” or “poor” feedback on their performance. The study concluded that verbal persuasion can influence behavioural choices and can also skew efficacy appraisal by creating mismatches between perceived and actual balance performance. The participants who received poor feedback were associated with choosing the least challenging task, while good feedback was associated with choosing the most challenging. The participants who received poor feedback also demonstrated reduced balance efficacy during a second task attempt.

Augmented feedback, another technique of verbal persuasion, is also used in self-efficacy appraisal in motor tasks. In a study by Wright and O’Halloran (2013) performance enhancement techniques were assessed to determine which techniques could best achieve self-efficacy and task performance through three novel tasks; putting a
tennis ball, seated bounce throw, and target kick. The results demonstrated that auditory feedback, which was related to verbal persuasion, had the greatest impact on the participants as it significantly explained self-efficacy and performance scores. In a further investigation, Wright, O’Halloran, and Stukas's study (2016) assessed six psychological performance enhancement techniques (PETs) to understand how they differentially improved self-efficacy and skill performance. The study also assessed whether vicarious experiences and verbal persuasion were supported and if the effects of the PETs remained after controlling for achievement motivation traits and self-esteem. The study utilized augmented feedback as a form of verbal persuasion, and had participants complete the same three novel tasks as Write and O’Halloran (2013). Augmented feedback in this study is defined as an overarching term for feedback from an external source that can be provided during or after a motor performance and contains information about the movement at hand (Chiviacowsky & Wulf, 2007). In addition, motivational feedback, viewed as a form of instructional reinforcement or praise (Write et al., 2016), is used in order to compare the effectiveness of augmented and motivational feedback. The study concluded that some sources of self-efficacy are more influential than others, and that motivation auditory feedback was the most influential on self-efficacy.

**Cognitive Tasks.** Verbal persuasion has also been examined through non-motor related tasks, such as cognitive skills and decision-making abilities. Similar to motor tasks, cognitive tasks enhance the belief of an individual’s mental capabilities; but improvement may go unnoticed since cognitive abilities are not skills that can be demonstrated or objectively viewed from an external source. However, there is evidence that cognitive tasks, such as problem solving and decision-making abilities, can be
influenced by verbal persuasion. Matsui and Matsui (1990) investigated the effect that self-efficacy had on high school math skills among undergraduate liberal art, social science, and natural science majors. The participants were asked to indicate their confidence in their ability to successfully perform a task or solve a math problem. The study found that math self-efficacy was significantly higher for men than for women, but there were no significant differences between men and women in the four sources of efficacy information. In addition, verbal persuasion did not make a unique contribution to math self-efficacy, but there was a high correlation between verbal persuasion and performance accomplishment, which was said likely cancelled the unique contribution of verbal persuasion to math self-efficacy (Matsui & Matsui, 1990).

In a study done by Luzzo and Taylor (1994), career decision-making self-efficacy was examined in an attempt to find if verbal persuasion would influence college freshmen career decision-making. Career Decision-Making Self-Efficacy (CDMSE) and verbal persuasion were measured. The study assessed a person’s confidence in his or her ability to complete a variety of tasks required for making effective career decisions. Each participant met individually with a career counsellor after completing the World of Work Inventory (WOWI) (Ripley & Neidert, 1987) to discuss the results. In this counselling session, only the treatment group of participants received verbal persuasion, while the control group did not. The counselling session was used to verbally persuade participants that they possessed the ability to acquire skills for effective career decision making. It was concluded that the participants who experienced verbal persuasion treatment from the career counsellor gained confidence in their abilities to engage successfully in the career decision-making process.
**Participating in Persuasion.** Verbal persuasion is often used to enhance the belief in an individual that he or she has what it takes to be successful. Despite the positive power that verbal persuasion produces, verbal persuasion can be used to undermine others’ belief in their abilities. Trash-talking is an obvious example of a verbal persuasion technique that is employed, especially in a competitive setting, to threaten someone’s belief in his or her ability. An interesting study by Conmy, Tenenbaum, Eklund, Roehrig, and Filho (2013) on verbal persuasion used trash-talk in order to examine the impact of trash-talk and competitive outcome on self-efficacy and affect in a competitive video game context from the user’s perspective. The study used 40 male participants who played the Madden™ NFL video game. The participants would participate in two rounds of play and were randomly assigned to either silent-talk or talk-silent. The silent-talk condition participants were asked to complete their first game in total silence and were permitted to trash-talk in the second game. The talk-silent condition participants were instructed to talk in their first game but remain silent in the second game. Self-efficacy, positive (PA) and negative (NA) affect were measured five times in the study: 1) before the first game, after the participants were informed which experimental condition they would play under; 2) after the first game; 3) before the second game, after the participants were informed which experimental condition they would play under (the opposite condition of the first game); 4) after the second game; 5) after the players were tricked that they were to play a third game, where they had to choose which condition to play under and enforce which condition their opponent could play under. The study concluded that the ability and freedom to trash-talk in a competitive setting were influential sources of efficacy information and affective related
responses. Results demonstrated that players in the silent-talk condition instantaneously exhibited lower self-efficacy, lower PA, and high NA. The players in the talk-silent condition showed a decrease in self-efficacy in the second game, compared to the players that were permitted to talk in the second game.

**Operationalization of Persuasion**

Throughout the literature when referring to self-efficacy, the efficacy source “verbal persuasion” is used in the same context, but it is a broad concept with many interpretations. When listed as a source of efficacy, Bandura (1977; 1997) and Feltz (1988) initially state the source as “verbal persuasion” but going into the idea in more depth it is later referred to “persuasion” or “social persuasion”, mentioning that verbal persuasion is a technique used. For instance, in Feltz’s (1988) paper, she states that “Persuasive techniques are widely used... in attempting to influence the learner’s behaviour. These techniques can include verbal persuasion and/or bogus performance feedback” (p. 280). There is not a direct definition of verbal persuasion, and this leads to confusion as to what techniques actually fall under this umbrella term. For instance, in Lamarche et al. (2015) the study did not define what verbal persuasion was but used “good” and “poor” feedback to demonstrate the techniques used in the study. In Write and O’Halloran (2013) verbal persuasion was seldom mentioned, but auditory feedback, such as knowledge of results and motivational feedback, was mentioned as a verbal persuasion technique. The follow up study by Write, O’Halloran, and Stukas (2016) also did not define what verbal feedback was, however it was suggested that “Verbal persuasion has generally been assessed in the literature under the guise of ‘augmented feedback’” (Write, O’Halloran, & Stukas, 2016, p 37). In addition, Matsui and Matsui
(1990) did not have a definition of verbal persuasion, however, an example was used to demonstrate the techniques used, such as “...encouragement and support from others” (Matsui & Matsui, 1990, p. 226) that often lead people to believe that they possessed capabilities that enabled them to be successful in their actions (Bandura, 1986).

Furthermore, Luzzo and Taylor (1994) did not define verbal persuasion, but cited “how people are led, through suggestion, into believing they can cope successfully with what has overwhelmed them in the past” (Bandura, 1977, p. 198). Finally, Conmy et al. (2013) clearly stated that trash-talk was a verbal persuasion technique but did not provide a definition of verbal persuasion. The authors, however, defined trash-talk study as “a deliberate form of verbal communication utilized by individuals for both affirmative personal reasons (i.e., motivation, fun), and disruptive motives toward opponents (i.e., distractions, intimidation)” (Conmy et al., 2013, p. 1002). Although there is not a direct definition of verbal persuasion, the efficacy source is used in a similar manner throughout the literature. As such, the present study will define verbal persuasion, or persuasion in general, as a way to encourage or discourage a person, with a variety of techniques, in believing that they have, or lack, the skills necessary to complete a task. There are many persuasive techniques that have been used throughout the literature, like augmented and motivational feedback, and trash-talk, but with the emergence of social media that is not face-to-face or verbal, and has become vast and instantaneous there needs to be an encompassing definition. I created the definition for the study through the overarching themes that were demonstrated in the literature.

**Social Media and Athletes**
There are many positive uses to social media. For instance, social media enables athletes to optimize their self-presentation, reveal aspects of their identity to the outside world, and counteract what are perceived to be negative public portrayals (Sanderson & Hull, 2015). Since there are many stakeholders in sport, the way that an athlete represents themselves to the public can raise or impede a stakeholder’s own public image. In the business sense, social media allows athletes to create and build a positive brand for themselves, as well as their sponsors or any organization they are affiliated with. For the last 10 years, studies have been examining how social media has affected organization-athlete and fan-athlete dynamics.

**Organization-Athlete Dynamic.** Organizations, like professional leagues and collegiate athletic departments, have had a hard time regulating what athletes say and do on social media. Through various social media outlets, such as Twitter, student-athletes have sparked public relation issues that the university and the athletic department have to deal with. In the United States, student-athletes are governed by rules and regulations determined by the National Collegiate Athletic Association (NCAA). In the recent years, social media platforms have revealed actions of the athletes that provides means for the NCAA to discipline student-athletes and their affiliated academic institutions. For example, Marvin Austin, a North Carolina football player, lost his athletic eligibility after an NCAA investigation determined he was receiving improper benefits; an investigation that was brought onset by Austin’s tweets from a nightclub (Mandel, 2010).

There are similar cases for athletes at the Professional level, for instance, Antonio Brown reportedly received a monetary fine of $10,000 from the National Football League (NFL) after he Facebook live-streamed the post-game team meeting on January
15, 2017 (Alper, 2017). The NFL bans social media posts 90 minutes before kickoff and lifts the ban after postgame interviews (Sessler, 2017); Brown posted before the players met with the media, during head coach Mike Tomlin’s slanderous postgame speech about the New England Patriots.

In a study by Sanderson and Browning (2013) it was examined the reasons why student-athletes post inappropriate messages on Twitter. Through semi-structure interviews it was found that athletes messages occurred due to non-training, surveillance/monitoring, and reactive training. Consequently, it was up to the interpretation of athletes on what constituted as “inappropriate” and would only receive feedback of the post if the stakeholder, that surveilled the post, found it was negative. Any training about the use of social media, in this case Twitter, and what to not to post was therefore served as a teachable moment or was provided through consequence. Past research (Sanderson, 2011) has demonstrated how organizations, such as athletic departments, use ambiguity in their social media policies to maintain power over student-athletes, in order to regulate student-athletes as well as deter any potential harm, from Twitter or other social media platforms, that may befall on organizational interests. However, it also demonstrates that there are many athletes that do not understand the implications that social media can cause.

**Fan-Athlete Dynamic.** Barriers between fans and athletes have also been broken down. Kassing and Sanderson (2015) examined the different ways in which social media impacted the fan-athlete dynamic. Using parasocial interaction (PSI) — which occurs when people and media personalities form a bond of intimacy over time, that resemble interpersonal relationships but remain one sided and mediated (Horton & Wohl, 1956) —
it was argued that social media has reshaped fan-athlete interaction by conveying a sense of community by bonding fans and athletes through more intense PSIs. There are no longer gatekeepers to go through to contact an athlete. For example, in May 2011, Brandon Phillips, the second baseman for the Cincinnati Reds, attended a little league game after a 14-year-old fan’s Tweeted asking him to attend (Kassing & Sanderson, 2015).

Even though social media can be used for fans and athletes to bond, it has also enabled fans to post threatening, demeaning, and insulting messages to athletes (Sanderson & Truax, 2014). Kassing and Sanderson (2015) identified this as maladaptive PSIs. The increased use of maladaptive PSIs can be justified because: of the anonymity of messages (Hardaker, 2010); social media platforms are a gathering place for fans to discuss sports, and like-minded individuals may fuel each other’s aggressive behaviour (Dart, 2009; Galily, 2008); and, being a fan is a significant identity component (Wann, Royalty, & Roberts, 2000). On August 10, 2011, after signing with the Philadelphia Eagles, New York Giants wide receiver Steve Smith, posted a message on his Facebook page dealing his decision to leave the franchise. The post received, as reported by Kassing and Sanderson (2015) 5,335 comments which included “ur terrible i hate u u were my favourite receiver of the g-men now i hate u go get hurt again in philly” (Kassing & Sanderson, 2015).

Previous research has shown that negative maladaptive PSIs from fans are currently an expected result of a bad performance (Sanderson & Truax, 2014). It is suggested to avoid the problem is for athletes to dispose of social media accounts. However, social media has become an essential method way of communication, and
therefore disposing of social media accounts does not become an ideal option.

Consequently, social media could offer psychological ramifications that plays a part in an athlete’s behaviour. In some cases, it could affect the way that a person judges the talent of his or her personal, or even opponents’, abilities. If this is the case, social media may affect athletes’ self-efficacy and, ultimately, their performances.

**A Posteriori**

This literature was added to the literature review after the data analysis was completed. This is a typical practice when using the methodology of phenomenology. For transparent purposes the literature added after data analysis is assigned to another section as more information reveals itself in data analysis.

**Social Media: Natives and Immigrants.** When examining social media, it was recognized that different age groups may utilize social media differently. An article by Prensky (2001) distinguishes between groups and the way they use new technology. In the article two groups are categorized; the Digital Natives (DN) and the Digital Immigrants (DI). The difference between the two groups is that DNs have grown up in the digital phenomena, with computers, videogames, cell phones etc., and DIs have had to adapt to most aspects of new technology. Prensky (2001) suggests that DIs speak an outdated language in a world that is constantly evolving towards new technology and DNs. As the article is derived for education and communication research, the author recommends that DIs (the teachers of the DNs) change the methods in which they teach their material, as well as new content to engage the DNs (Prensky, 2001).

**FoMO.** The Fear of Missing Out (FoMO) is defined as the feeling that there is the possibility that others are participating in rewarding experiences that one is left out from
(Przybylski, Murayama, DeHaan, & Gladwell, 2013). As it is a relatively new concept, FoMO has been discovered to be one result of social media usage. Przybylski et al. (2013) conducted three studies with the aim to advance the empirically-based and theoretically-meaningful concept of the FoMO phenomenon. The first study intended to create a robust individual difference measure of FoMO, in order to create a sensitive self-report instrument, and data was collected from a large and diverse international sample of participants. The second study aimed to empirically evaluate FoMO by gaining a broad perspective from a nationally represented sample. With the broad perspective, the study wanted to investigate demographic variability in FoMO to explore who in the general population were prone to FoMO. The second study also wanted to evaluate FoMO as a factor linking past research on individual differences with motivation and social media research to research on behavioural engagement with social media (Przybylski et al., 2013). The purpose of the third study focused on a university sample group to receive a in-depth understanding of how FoMO related to emotion and behaviour. More specifically, how frequently participants high in FoMO used social media, and the extent in which FoMO allows social media to be a distractor from present life. The results of Przybylski (2013) found that, consistent with earlier research, FoMO tends to be a phenomenon that influenced the younger generation. It was also found that individuals that demonstrated less satisfaction of the basic psychological needs for competence, autonomy, and relatedness reported higher levels of FoMO, and is suggested that low levels of psychological need satisfaction could be a contributor to the risk factor of FoMO (Przybylski, 2013). When examining the links between FoMO and psychological well-being, the study found that FoMO may be associated with negative experiences,
which supported the speculation from previous literature (Morford, 2010; Wortham, 2011; Turtle, 2011). Przybylski et al. (2013) also found that FoMO was negatively associated with a person’s general mood and overall life satisfaction, which support findings from previous research that higher negative social and emotional states that were associated with social media usage also related to FoMO (Burke, Marlow, & Lento, 2010; Lampe, Ellison, & Steinfield, 2007). One of the most important findings from Przybylski et al. (2013) was the examined link between FoMO and social media engagement that demonstrated that lower levels of need satisfaction, general mood, and overall life satisfaction related to seeking out social media engagement to the extent that they related to higher levels of FoMO. Finally, study 3 from Przybylski et al. (2013) demonstrated that those high in FoMO tended to use Facebook during their routine, including immediately after waking, before going to sleep, during meals, during university lectures, as well were more likely to message people while operating motor vehicles.

**Gap in Research**

There are many ways to use social media, and some of these ways have started to be used strategically in sport, particularly to play mind games with opponents. Since social media is a new phenomenon, there is a lack of literature on how social media can affect athletes’ performance; specifically, athletes’ self-efficacy.

A study by Encel, Mesagno, and Brown (2017) has investigated how Facebook use influenced sport anxiety. The authors hypothesized that the more frequent an athlete used Facebook per day, the more they would experience different types of anxiety. With the guidance of self-presentation theory by Schlenker and Leary (1982), the logic of the
study was that the participants that were more concerned about other impressions will have more interest in what is being said on Facebook (Encel, Mesagno, & Brown, 2017). The study found no relationship between Facebook use and sport anxiety, but the results found that Facebook did have an impact on athletes’ mental game. The study found that Facebook impacted an athlete’s mental game by distracting the athlete from his or her optimal psychological preparation and concentration on tasks during performance (Encel, Mesagno, & Brown, 2017). Although the study by Encel, Mesagno, and Brown (2017) have established that social media does have an impact on an athlete’s mental game, they have not determined if social media can impact an athlete’s perception of ability.

Within the present study, as Figure 2 demonstrates, if social media is introduced into an athlete’s life, becoming part of his or her environment, it should influence the

![Figure 2: Introduction of Social Media to Bandura's (1986) Social Cognitive Theory Model](image)

athlete’s cognitive and behavioural factors such as self-efficacy. As social media is
regarded as an environmental factor it is important to understand social media and social media use — why people use social media — while examining self-efficacy

**Uses and Gratifications.** The Uses and Gratification theory identifies that people tend to seek out media among competitors that fulfills their needs, which leads to ultimate gratification (Blumler & Katz, 1974; Swanson 1987). Uses and gratification theory’s categories were originally developed to understand why people used television (Palmgreen & Rayburn, 1979); as media evolved the categories expanded to new media (Korgaonkar & Wolin, 1999; Papacharissi & Rubin, 2000; Ko, Cho, & Roberts, 2005). Seven themes were found throughout the literature: 1) Social interaction; 2) Information seeking; 3) Pass time; 4) Entertainment; 5) Relaxation; 6) Communicatory utility; and 7) Convenience utility, which is providing convenience and usefulness to people. From the original uses and gratifications categories, Whiting and Williams (2013) identified three more themes that were linked to social media; information sharing, expression of opinion, and surveillance/knowledge about others. These ten reasons assist in identifying where self-efficacy could be reappraised.

**Social Media in Self-Efficacy Appraisal.** Social media has become a strategy to pass time, as well as for entertainment, and relaxation. Consequently, convenience utility is another known reason why people participate in social media. Whiting and Williams (2013) defined convenience utility as providing convenience or usefulness to individuals, and was a reason mentioned by 52 percent of the study’s participants. With 64 percent of American adults owning a smartphone (Smith, 2015), there is potentially an increase to the accessibility to social media. Therefore, not only does it become convenient for people to be able to communicate and connect with multiple people at once, social media
has also become a feature that is readily available with no time restraints; it is easily accessible, convenient, and ubiquitous, to the extent that if a person is actively or passively participating in it they are a part of a two-way conversation that may impact their self-efficacy.

Through an athletic point of view, athletes have become more susceptible to viewing posts from their competition, and therefore can create more opportunity for self-efficacy appraisal (Mussweiler, Rutler, & Epstude, 2006). In essence, social media can help an athlete, or it can create more of a burden for the athlete. The Whiting and Williams (2013) ten reasons give an optimal amount of opportunity for athletes to, consciously or unconsciously, participate in persuasion. The most popular reason being social interaction. It was found that 88 percent of people, in the study, used social media for social interaction. Respondents indicated that social media was used to connect and interact with people they would not regularly see; this ranged from people from friends, family, and spouses to co-workers, old friends, and acquaintances (Whiting & Williams, 2013). For that reason, athletes have options on people and groups that they want to connect with and follow.

Social media also allows people to seek information, as well as facilitates and contributes information that they can share with others. According to Whiting and Williams (2013) study, 80 percent of participants reported that they used social media to seek information and 56 percent admitted that they use social media for communicatory utility — a source that provides information for people to talk, or gossip, about. People also use social media as a way to surveillance and gain knowledge about others. That is, 32 percent of Whiting and Williams (2013) participants mentioned the different ways that
social media was used to watch others, as well as mentioned that they wanted to know what others were doing so that they can keep up. As a result, social media provides information on others that creates a dialogue for athletes to talk about; such as accomplishments/failures or stats on competitors.

Since social media offers a two-way conversation, it allows for information sharing. Information sharing is different from information seeking, as people use social media to share information about themselves with others. The two-way conversation also enables people to express their thoughts and opinions. It was found in Whiting and Williams (2013) study that 56 percent of respondents discussed how social media allows them to comment on and “like” posts, as well as express opinions anonymously, criticizing others, and vent. Similar to Conmy et al. (2013) results, social media provides a platform where people are able to be the silent observers, and/or participate in the conversation; silent-talk, talk-silence. It was determined in Conmy et al. (2013) study that people who were not allowed to vocalize, or “trash-talk”, in a competitive setting demonstrated lower self-efficacy. There are many similarities between the study and social media. People have the unconscious ability to become persuaded when they are silent participants. While people can use social media that allows information sharing and expression of opinions to potentially raise their efficacy by persuading others. Therefore, the act of participating in social media can encourage or discourage a person in believing that they have, or lack, the ability necessary to complete a task.
Chapter Two: Rationale, Purpose, and Hypothesis

Rationale

The purpose of this research is to understand the impact that social media has on self-efficacy. Self-efficacy is a person’s judgement on his or her abilities, and if the abilities will allow the person to complete a task successfully (Bandura, 1986). Self-efficacy is a cognitive tool that mediates one’s motivation and behaviour (Feltz, 1988), and contains four sources that help regulate it: mastery experiences, vicarious experiences, physiological and affective states, and verbal persuasion. Although all sources are important, verbal persuasion is used extensively because of its ease and availability as it is a broad concept with a variety of interpretations.

There are many examples in the literature on how persuasive techniques, such as augmented (Lamarche, Gionfriddo, Cline, Gammage, & Adkin, 2015; Write & O’Halloran, 2013) and motivation feedback (Matsui & Matsui, 1990; Luzzo & Taylor, 1994), and “trash-talking” (Conmy, Tenenbaum, Eklund, Roehrig, & Filho, 2013) influence a person’s self-efficacy. These types of techniques have been used extensively throughout athletics to assist with athletes’ confidence in motor skills, decision making, and motivation.

Social media has become an omnipresent asset that is constantly evolving the way that people communicate with each other. Social media is the internet-based software and websites that promote the participation of sharing personal information and communicating with others on a broader scale (Kaplan & Haenlein, 2010). In 2015 nearly 65 percent of American adults (18+) used social media (Perrin, 2015); as opposed to in 2005 where only 7 percent of American Adults used social media. Social media has also
adapted to portable devices, and in 2015 64 percent of American adults were shown to own a smartphone (Smith, 2015). As social media has become vast and rapid, the use of face-to-face and verbal communication has declined.

Social media is increasingly playing a more dominant role in sport, and athletes’ lives. There are examples in the literature on how sport organizations (Sanderson & Browning, 2013) and fans (Kassing & Sanderson, 2015) are affected by the way that athletes use social media. Although the literature has studied social media in a sport organization context, the results demonstrate that there are many athletes that do not understand the implications that media may cause (Sanderson & Browning, 2013), and that there are perhaps psychological ramifications that play apart in an athlete’s behaviour (Kassing & Sanderson, 2015).

There is a limited amount of literature on how social media can influence an athlete’s psychological constructs, and no literature on how social media impacts an athlete’s self-efficacy. One study by Encel, Mesagno, and Brown (2017) examined if there was a relationship between an athlete’s Facebook use and sport anxiety. The study believed that sport anxiety might lead to increased frequency of Facebook use; the logic being that athletes want to present an ideal self to their social network. The study concluded that there was no relationship found between Facebook use and sport anxiety, however, the results found that Facebook impacted an athletes’ mental game by acting as a distraction from optimal psychological preparation and concentration on tasks during performance.

With the emergence of social media “persuasion” may be a better suited term for this source of efficacy, as there is an increase in techniques that are not necessarily verbal
or needed to be practiced in the presence of the interaction. Persuasion, verbal and nonverbal, is used as a way to encourage or discourage a person in believing that they have, or lack, the skills necessary to complete a task. That is, is an athlete’s belief in their ability influenced by what they view and receive on social media?

**Delimitations/Limitations, Purpose, and Hypothesis**

It has been demonstrated in past research that persuasion has acted as an influencer to negate a person’s perception of ability (Lamarche, Gionfriddo, Cline, Gammage, & Adkin, 2015; Write & O’Halloran, 2013; Matsui & Matsui, 1990; Luzzo & Taylor, 1994; Conmy, Tenenbaum, Eklund, Roehrig, & Filho, 2013). Social media has ushered in a new format of persuasion where there is limited research, specifically on how social media can influence a person’s behaviour and beliefs about his or her capabilities. Approaching research from athletes’ perspectives, it can be determined if and how social media can influence athletes’ self-efficacy.

There are several delimitations that were used during the study. To begin, the study has taken on a qualitative approach, which utilizes a small group of individuals for participation. Consequently, by using a small group of participants phenomenology allows for the investigation of topics that could be considered subjective. By using a phenomenology approach researchers were able to gain an understanding of the lived experiences of the participants.

Due to the lack of research on examining the impact that social media has on athletes’ self-efficacy, the study has taken an inductive approach to examining research. Therefore, there were limitations on how the study could be structured. The study has chosen to use specific criteria in choosing what participants and sports to include. The
participants are athletes at the “train to compete” level or higher. As such, the athletes’ perspectives will be limited to athletes at a competitive level. The study is also specific in choosing what sports to include. The study used sports that include combat sports, with athletes that participate in individual sports. Looking at one-on-one sports with a referee will assist in the inductive qualities of the study.

A possible delimitation of using combat sport athletes is their psychological characteristics. Although there is not an abundant amount of research on this population, combat sport athletes may differ from other athletes. A study by Litwiniuk and Daniluk (2009) found that basketball players demonstrated better social skills, higher impulsivity and aggression than taekwon-do competitors. In two other studies, it was proven that practicing judo lowers aggression levels or keeps aggression at the same level (Lamaree & Nosachuk, 1999; 2002). In other studies, however, it was revealed that training judo increased aggression, while training in karate lowered aggression (Reynes & Lorant 2001; 2002; 2004). Perhaps the psychological characteristics depend on the combat sport, however in the present study it might mean that results may not be generalizable to all athletes.

The study has limited the age range to 18 or older. The basic “train to compete” level starts for females at the age of 15 and finishes at the age of 21, and for males at the age of 16 and finishes at the age of 23 (Sport for Life, 2016), however ages may vary in each sport because each sport is tailored to get the optimal performances out of their athletes. Overall, the delimitations and limitations that the study uses have limited the generalizability of the findings, as well as the conclusion that can be drawn from the data.
The purpose of this study was to understand the impact that social media has over athletes’ self-efficacy. It was hypothesized that from viewing social media, there is an impact on self-efficacy.
Chapter Three: Methodology and Methods

The study used a phenomenological approach. Phenomenology is the study of phenomena; how the world in which people live is experienced through conscious acts (Husserl, 1970). The approach allows for people to relive a habit-based experience that goes unnoticed and brings it to the forefront of their consciousness. This allows for phenomenologists to investigate human experience at a fundamental level and attempt to extract meaning from a common experience in individuals’ mundane lives (Creswell, 2007). Social media is the experience that was investigated in order to understand what impact it had on athletes, and if that impact influenced the way that the athletes viewed their abilities. In the case of this study, phenomenology was appropriate to use as it allowed for researchers to conceptualize notions that might have otherwise been dismissed by the constraints of more traditional approaches. There is an ongoing partnership between psychology and a person’s lived experience in order to better understand people’s lived experiences. Psychology as a human science was developed by Amedeo Giorgi because he felt that the discipline of psychology was missing its purpose of capturing psyche (Giorgi, 2000). It was Giorgi’s (2000) opinion that psychology’s methods were not accessing it properly, which was due to the fundamental assumptions about the phenomena that was occurring. As there has not been much research completed on the topic of athletes and social media, the use of phenomenology was used as a way to gain a deeper understanding of the way that social media can impact athletes’ psyche, specifically their self-efficacy.

Within this type of research, it is important to acknowledge my own personal connection with social media as an athlete, as could influence my attitude as a researcher.
Social media is meaningful to me as a competitive athlete, as I become less confident about my own skill and abilities the more I “creep” on social media; I become intimated by, or overly-confident of, opponents before I have tested my skill against theirs. When I finally do compete against the opponent, my attitude and mindset, and most likely performance, are presumably much different than they would be without the influence of social media. I wanted to examine if other competitive athletes hold social media in the same regards that I do or understand how other athletes cope with social media differently.

**Procedure**

Ethical approval was obtained from Brock University’s Research Ethics Board. The participants were recruited over a range of sports through a variety competitive sports based on combat sports, such as boxing, wrestling, martial arts, fencing, etc. The purpose of drawing from different combat sports, as well as both male and female participants, was to discover if the pattern might be consistent even across a heterogenous sample and amongst a certain level of competition. The participants were contacted through the sport program/club by email, asking for permission for the researcher to announce the participation opportunity to the athletes, or for the leaders and/or coaches to relay the information and the contact information to the athletes. There were no obvious benefits for the participants, however, from the information gathered from each interview, possible coping skills were discovered that may help the athletes in future athletic pursuits. Individuals interested in participating contacted the researcher through the email that was provided. After being contacted by participants, the researcher provided an overview of the purpose of the study. During this time, the participant was
also able to ask questions or express concerns that they may have had regarding the study. Once participants agreed to take part in the study, a date and time, as well as location was confirmed with the participant. When participants arrived at the location they were asked to read and sign the informed consent document. Once the participant gave his or her consent the interview began.

**Data Collection**

**Participants.** A purposeful sample, which includes intense representations of the phenomenon, was used for the study. The study used high performance athletes from wrestling, sport karate, fencing, Brazilian jujitsu. Males and females were both recruited for the study, and the ages ranged (18-38) depending on how the sports’ Long-Term Athlete Development (LTAD) model defines the “train to compete” to the “train to win” stages. Athletes who were 18 or older only qualified for the study. The “train to compete” stage is where competition becomes serious, and they have entered a stage where they have chosen to specialize in one sport and excel at the highest level of competition possible (Sport for Life, 2016). There were 10 athletes that participated in the study; 7 females and 3 males. Saturation was satisfied as the data started to demonstrate consistent and repetitive responses to index questions.

**Sport Inclusion.** The participants for the study performed an individual sport that was based on combat sports. It is difficult to judge one’s competency when performance outcome is subjective; there is no absolute measure of ability and people begin to judge their performance based on the comparison of others. As a result, when a referee is involved an element of persuasion is added to the judgement, as a social influence
determines how one views his or her ability. This study included the sports wrestling, sport karate, fencing, and Brazilian jujitsu.

**Interview.** Interviews served as the main method to collect a detailed understanding of how social media affects an athlete’s self-efficacy. The participants took part in one semi-structured interview that ranged from 20-60 minutes. Interviews were audio-recorded. The interviewer asked the participants a variety of questions from what sport and level of sport they played in, what their social media usage was like, and how social media impacted them as an athlete. The interview questions were guided by the Quinn Patton (1990) *Six Categories of Questions.* This guide was used because of the way that it structured the interview through questions that were experience/behaviour, opinion and value, feeling, knowledge, sensory, and background questions (see Appendix A for interview guide). Individual interviews were held at Brock University, or in a similar room at the athletes’ facility.

Prior to the interview starting each individual was asked to read and sign an informed consent document (see Appendix B for a copy of the consent form). Before starting the interview, participants were reminded of the voluntary participation section on the informed consent form. The consent form reviewed that participation was voluntary and that if there were any questions that were uncomfortable they were able to pass, or even withdraw from the interview. After the interview was completed the recording was transcribed for further analysis. Before the transcript was used in data analysis, the transcript of the interview was emailed to the participant to review and consent to. The participant was given two weeks to review the transcript; if the participant did not respond, it was assumed that he or she consented to the transcript.
Once consent was received the participant was unable to withdraw their data from the study. This was made clear on the informed consent document.

**Data Management.** The audio-recordings from the interview were transcribed verbatim using an office software (Mac’s Pages, or Microsoft office word) on a private computer. The audio-recordings and the typed transcripts were stored on a private computer and backed-up on a portable hard drive. The information collected through the interview was kept confidential. The participant’s age, sport, and level of sport were recorded during data collection; however, the data was coded for researcher’s own records in order to tell one transcript from another. Any quotes from the interview were embedded in the results of the data, and personal identifiers, were not made obvious to outside parties. Any third-party identifiers, such as opponents that participants mention in the interview, were also kept confidential.

**Data Analysis**

Before the transcripts were analyzed, the participants reviewed the written transcripts, and consented to the use of the information in data analysis. Once the participants consented the transcripts were printed and used in data analysis. The transcripts were read over carefully three times; once to understand the sense of the whole, next to read for salience, and a final time to read for pattern. In order to read for patterns, the data were inputted into a chart and a cross-interview by-question analysis was used. The data were looked over a second time to determine if there were patterns associated with body, space, time, and relation (BSTR), as they are typically phenomenologically guided lifeworld categories. Once patterns were established, the data were read over to determine salience commonalities or “standalones”. The final stage of
analysis was separating the by-question patterns and the BSTR patterns to determine thematic clusters and designations.

**Trustworthiness and Triangulation**

Due to the nature of qualitative research, there were actions taken in order to collect and analyze the data in a trustworthy way. The assessment for the trustworthiness of the data uses the criteria of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility involves whether the research findings are believable in a way that the results drawn from the data represent a credible theoretical interpretation. This is achieved through using verbatim transcripts, checking with informants, re-reading the data sets, and providing clear descriptions of each phase of data analysis with examples of each step from the raw data. Credibility is also enhanced when language, like jargon appropriate for sport, of the participants is used.

Transferability refers to the degree in which the results of the study can be applied outside of the study. Transferability is not assessed by the researcher but has to be assessed by the opinions of readers of the study. With rich descriptions of the research and steps taken throughout the research, however, readers will be assisted in the decision about transferability. The more transparent and detailed the descriptions, context, and processes of the research the more likely the study will be able to be useful in other contexts. This includes rich descriptions of the informants and their contexts in order for the readers to determine if the participants and contexts are similar to their own, and if the findings could be transferred over to their own circumstances.

Dependability is regarding the strength of internal design that the research has chosen. With a strong internal design, the reader can be confident that the data collection and data analysis have
undergone enough cross comparison mechanisms. As a result, it can be determined that the findings are obtained inductively from the original data sets in the research and deductively from previous literature and theoretical frameworks. Dependability helps prevent findings being based off of the researcher’s biases and assumptions about the questions under investigation. Triangulation, which is checking the integrity of conclusions drawn from the data, of data collection and data analysis contributes to dependability. The more clearly the processes of research are described the more dependable the findings of the study are. Confirmability is how well the study’s findings are supported by the data that is collected and analyzed. Confirmability is supported by verbatim quotes, the language of the participants, and providing access to the processes of recursive reduction, either in the body of work or the appendices, adds to the confirmability. In the study the criteria of credibility, transferability, dependability, and confirmability has been employed which contributed to the trustworthiness of the study.
Chapter Four: Findings

Levels of Data Analysis

The following chapter will be organized based on the three-phase process that were utilized to analyze the data. Phase 1 involved within data-analysis where interviews were read through individually three separate times to gain a sense of the whole, for salience, and for pattern. When reading for salience, interviews were read over to determine if there were prominent quotes. When reading for pattern, interviews were read over to determine the commonalities. Each interview was then summarized based on the themes and patterns that were examined in the first phase of data analysis. Phase 2 involved across data analysis using a cross-interview by-question analysis. The data was inputted into a chart in order to analyze the commonalities or standalones in participants’ responses. Once patterns were established, the data was read over to determine if there were themes associated with the categories of body, space, time, and relation (BSTR). Phase 3 of data analysis was used to separate the by-question patterns and the BSTR patterns to determine thematic clusters and designations.

Phase 1 — Within Data-Analysis; Reading for the Whole, Salience, and Pattern

After interviews were transcribed verbatim, each interview was individually read over carefully three times. The first time to gain a sense of the whole interview, the second time to read for salience, and the third time to read for pattern. The following section presents a summary of the salient and pattern found in each participant’s interview.

Participant 1. The following section summarizes the themes and patterns examined for Participant 1; a 24 year-old female who formerly competed in sport karate.
The participant competed for 10 years, as well as at an international level. The athlete would rank her ability as mid-high range between the best athlete in the division and the worst athlete in the division.

Salience. One of the first points made was that social media is a big part of young athletes’ lives; demonstrating that social media is used within her age group and if someone does not use it, people question why. But social media is used to take up time in someone’s life by distracting them from the current situation, because of boredom or to escape from reality. More importantly, there was an aspect of social comparison throughout the entire interview. With social media, the participant knows that things are edited and framed, however she noticed that people do not post about their bad days. There was an observation about how social media posts are not aimed at people or focused on putting people down; it is about showing off accomplishments. Consequently, a person’s posts can make it appear as if he/she have a “picture perfect” life and makes the participant feel that she should be doing something differently. In a sport perspective, the more frequently someone posts the more invested they appear, and an increase in posts about how they are doing in the sport makes it appear like they are improving. With social comparison, it makes her second guess herself as it makes her feel like she should be doing more or something different. There appeared to also be a belief that to compete at a high level an athlete needs a certain mindset, something which she does not think she has; especially since she has determined where her skill lies in comparison to others. Therefore, when a new opponent, someone she is unfamiliar with, comes into contention she is threatened about her position in rank. That being said, the want for acknowledgement is also a theme mentioned. She would be very hurt if her biggest
opponent ignored her friend request, as she would assume the opponent would not think it was worth adding her. She also mentioned that “likes” and “comments” influence impressions of a post, for instance, the more likes and comments someone has determines how much support they have, or how well liked they are.

**Pattern.** There are a couple of patterns demonstrating how social media has an impact on self-efficacy from the participant’s interview. The use of social media and strategy in regard to becoming familiar with opponents. That includes keeping tab on opponents or finding videos on opponents to use as game tape. The participant also acknowledged that there is social comparison on social media as people usually post positive things about themselves or their life, and that constant scrolling through the newsfeed can make you feel “shitty” about your own life. In regard to sport related posts, responses suggested that the frequency of posts about your sport insinuates that you are more invested in the sport, and the more likes or comments you receive on your posts indicates a higher ability.

**Participant 2.** The following section summarizes the themes and patterns examined for Participant 2; a 20 year-old female who competes in sport karate. The athlete has competed in sport karate for 10 year and would rank her ability in the top third of her division. She competes at an international level.

**Salience.** Social media is used to monitor and to communicate with people on a fast and instantaneous level. The participant mentioned she would feel out of the loop and left behind if she did not participate in social media. She uses social media to see what people are up to and how they are doing in the sport, with past results and live feeds, but also mentioned how social media initiates discussion about how athletes are doing in the
sport. Interestingly, the interview suggests that monitoring does not have to have a purpose. It can be done when a person is bored or does not have anything else to do; at times it can be a form of entertainment for the individual monitoring. It was also suggested that interactions on social media were different from the face-to-face interactions with her opponents since sporting environments appear to be supportive even though everyone has the same goal, which is to win the competition and beat their opponents. Relationships seem to be defined behind the screen. People add others on social media if they talk to them or consider them friends. The participant stated that she usually talks to the people that she competes against, so if they do not add her on the platform she would be a little insulted; instigating some emotion that could carry over to the next time they compete. There is almost an obligation to watch and gain intel on opponents, and social media allows people to watch what is going on in an atmosphere that they are not present in. People that are competing also are not necessarily consenting to videos that are being taken and posted of them online. So, an athlete can constantly monitor and gain knowledge on an opponent not only unknowingly but also instantaneously. Monitored posts are taken with a grain of salt by the participant because it is acknowledged that anyone can post anything about themselves, and people need to look at the context before assuming. There is also a sense of being monitored, and how others judge them. For instance, how losing looks to other people, especially losing to a newcomer or someone of lesser skill. As a result, the way third party people regard athletes’ ability makes her second guess their skill. If a third party starts posting about opponents, like promoting or “boosting”, it messes with her head. Not because she thinks her ability is lacking, but because she thinks her opponent’s skill has surpassed hers. Or,
in another instance, if a third party is promoting her how that post puts pressure on her to perform well.

**Pattern.** A benefit of social media that is suggested throughout the interview is that social media helps people organize and communicate plans easier and faster. However, there was a recognition about getting nervous and second guessing one’s own ability when viewing what other people posts about themselves (in a sport related setting). In addition, it is suggested that social media is used to check up on people and see what they are doing, and that different people react differently to social media usage. There was also the realization, from the use of social media, that there could be more time and effort put in to better oneself in the sport.

**Participant 3.** The following section summarizes the themes and patterns examined for Participant 3; a 30 year-old male who competes in Brazilian Jujitsu. The participant has started to specialize in Brazilian Jujitsu for the last 3 1/2 years. Within his division the athlete would rank himself as mid-high level, and competes at a provincial level.

**Salience.** The main use of social media, for the participant, is that social media is free with no boundaries and is an easy way to connect with people all over the world and spread knowledge. With sport, he uses it to monitor other fighters and benefit from using their training habits, or finding an advantage over them, as well as being confident he’s ready for competition. He mentioned that he looks to higher level fighters to learn from them. He is also aware that opponents are monitoring him and his posts, and that people watching him can affect him in future performances; for the same reasons he watches other fighters. There was an arrogance about the use of social media, how he recognized
that it affects other people but does not think that it affects him. There seems to be a misconception about how social media affects athletes. The participant is focused on how trash-talking is the variable on social media that is the impact on performance. Which may be why he is confident that social media does not alter his conception of his ability. Yet, in several answers it is evident that when he sees posts of his competition succeeding it motivates him to train, or he becomes more confident if his competition dodges him on social media. As previously stated, he also makes sure to use social media to make sure he is competition ready. Consequently, he demonstrated that social media does in fact impact his behaviour, he is just unaware of it. It may be because of his age group (30+), and that he is just starting to utilize social media as a tool, that he is under the impression that he uses social media differently than others. However, he seems to be adapting as he is tailoring social media to his business and filtering what he wants to see. There was also an awareness that impressions of people on social media are diluted, and that there is no way of knowing how good an athlete is from their posts on social media.

**Pattern.** Social media is used as a comparison and motivational tool. The use of social media is to obtain more knowledge to use as a learning tool as well as to better one’s own game. It is used to see what people/competitors are doing, while finding holes in their game; as well as to keep up with people and the sport.

**Participant 4.** The following section summarizes the themes and patterns examined for Participant 4; a 29 year-old female who competes in Brazilian Jujitsu. The athlete has been competitive in Brazilian Jujitsu for 5 1/2 years. She would rank herself in the top 90% of her division, and competes at an international level.
**Salience.** The theme of monitoring, in different ways, is the biggest purpose the participant listed. Social media is a platform where all the information for a sport is in one place, and it takes little effort to find it. She mentioned that social media is a good way for tournament promoters to reach the athletes to promote tournaments and seminars. This is a benefit for athletes who may be outside the tournament circle and promotes inclusion. She stated that watching opponents, to keep an eye on them and see how they are progressing outside of tournaments, is another monitoring technique she uses. Interestingly, she watches the results of the tournaments and uses the results to gauge herself against her opponents especially if they are not always competing against each other. In regard to social media affecting ability, she thinks that it only affects the athlete in a minor way. She made an interesting point that social media is how people perceive themselves, and if other people are excelling at the same thing there might be doubt in ability. Although it seems like a minuscule affect, social media creating doubt in ability through social comparison is a problem. That being said, she says that she is most worried about underestimating her opponent. However, many of her answers about social media suggested she believes differently. She had several concerns about not being good enough when gauging herself to her opponents. There was a theme of “fear of missing out” when it comes to training; that she cannot commit the time or finances to training as much as them. She also discussed that an increase in positive posts from opponents means they are having success and that they are progressing in the sport. She never knows the real reality of what they are posting, consequently she stated she overthinks and self-judges based on the assumption that her opponent is getting better. In addition, the participant mentioned that a way to use social media can be a way of interacting with
people, but also to get approval from others. As a result, she mentioned that the social support from her team aids her in believing in her own ability.

**Pattern.** There is a big theme of questioning ability based on social media and social comparison. For instance, not being able to train as much as one wants because of responsibilities like work. Social media is also noted to be used to keep up with competitors and tournaments, allowing athletes to gauge themselves against competitors on social media.

**Participant 5.** The following section summarizes the themes and patterns examined for Participant 5; a 29 year-old female who competes in sport karate. The athlete has been competitive in sport karate for 14 years. She would rank herself as mid-range in her division, and competes at an international level.

**Salience.** The participant stated that she does not remember why she joined social media, and it might have just been because it was the fad that was going on at the time. In general, she uses social media to watch and relieve outside stresses because it provides a world that people do not need to worry about. It is interesting to note that during the interview she listed reasons to use social media in an athlete’s point of view before the general point of view, like the question asked. As an athlete, she mentioned that there is an incentive to continue using social media because it allows her to monitor her competition. This includes watching game tape and strategizing for future matches against opponents and reaching athletes that are in another country that she would not interact with. A point that stands out is that she described how she does not need to know the opponent to add them, that she will add them to observe what they are posting. She also mentioned how she would not care if someone did not add her for that reason. Even
though she watches what her opponents post it appears that she does not understand some of the reasons that people post. More specifically, when athletes post highlight reels about themselves when they are not necessarily ranked high. But only people who compete within the circuit would know that, as she acknowledged, and that the average person does not see a difference ability-wise. This creates positive reinforcement for the poster, which could be annoying to people who know differently. This could also be annoying to the participant because she chooses not to post anything of her within her sport. Therefore, it could be that she sees the positive feedback people of average skill receive but does not receive any herself. Her logic being that there is not a need for people to know how she is doing; a direct reflection of how she uses social media in sport, which she mentioned was to keep an eye on opponents. She interestingly thinks she uses social media differently than other people. Perhaps she thinks there is an advantage to keeping results of herself off of social media. Yet, there appeared to be an effect on her for only monitoring. Not only by being annoyed by other’s posts, her interview also demonstrated that she second guesses her ability if she sees an opponent posting results or frequent training posts. This is particularly the case if she has beaten that opponent in the past and is made aware that they are improving; something that she mentioned she assumes from their social media posts. She also admitted that because she is not able to go to many tournaments any more she gets flustered before she competes, with the assumption that her competition has done more than her.

**Pattern.** A pattern is that social media is used to see what people and competition are doing, by openly seeking and investigating what people are posting. However, there was this underlying frustration of not being able to compete and train more often than one
can; the work-life balance. On the other hand, social media was also mentioned as a distraction and stress reliever.

**Participant 6.** The following section summarizes the themes and patterns examined for Participant 6; a 19 year-old female who competes in fencing. The athlete has competed in fencing for 1 year and competes on the university varsity team. Within her division the athlete would rank herself as the topped ranked of her gender in her weapon class at the university, and competing within the university league she would rank herself middle range.

**Salience.** An interesting perspective from the youngest participant on how social media has impacted her. Unlike the other participants she admitted that she prefers to use social media on her phone because she prefers the way the apps look. She stated that she uses social media as a “mind-break” from “real world things”, like work. She also mentioned that there is a sense of reward when she uses social media, which gives more incentive to keep using it or checking it. She suggested how she feels a weird sense of accomplishment when friends “like” a post. She also acknowledged that everyone uses social media and if someone is does not use it they are out of the loop on things that are occurring. Social media is also convenient because a person can stay in touch with people without the time commitment. In regard to how it affects people’s success in sport, the participant commented it could be negative because of harassment on social media but also suggested how it could be used to boost confidence through social support as well. Although new to the sport, there is a sense that the participant uses social media to watch how opponents, especially those who are the most elite in the sport, are competing; to watch what their results are and to learn from them. There is also a sense of social
obligation to use social media. She is just becoming familiar with people in the sport and stated that she would not consider opponents from other schools’ “friends” but thought that would change in the future. She admitted that adding her opponents would be polite because she would see them all the time. A benefit of adding them can also including the ability to message opponents to find out attending a certain competition. It would be interesting to understand what she defines as “friend”. Strategy-wise the participant stated that it appeared to be favourable to follow opponents on social media to learn from what they are doing, especially if referees are making more favourable call for opponents.

During the sport’s season, posts tend to be more sport related, however, she noticed that most posts are positive and center around success in sport. The participant assumes that the most confident people are successful and know what they are doing, and she based this assumption around what they post. Consequently, she reasoned that people who do not post much about their sport have a lower confidence level, even though it could be that they are not an active social media user. Watching an opponent’s activity is also a trend she mentioned. How the frequency of an opponent’s posts can hint on how well they do at competitions. Going from always posting to not posting at all can signify that an opponent did poorly at a competition; in turn, this could be reassuring. In addition, she understood that social media is framed, and people make it seem like they are living their best life. She acknowledged that with social comparison it is difficult to see through that illusion without questioning yourself. Contrary to what she was saying, she did not think that social media affects the way she perceives her ability; she stated that an athlete’s ability is something that is measured in training or competition. She said that social media is an afterthought that is separate from practice and competition, and that the only
way social media would carry on into her performance is — a hypothetical scenario — if there was a negative post on her ranking or performance. In the interview, however, she felt that social media does overlap in her life. She did admit that athletics are not a top priority for her, but it appeared that she does question her decisions when there is an upcoming competition and she views an opponent’s post about training.

**Pattern.** There is a pattern of using social media to see what people are up to. Specifically, an individual keeping up with people and having people keep up with them without the time commitment. Interestingly, there was a theme that suggested that there are social standards to social media, such as a polite obligation to add or follow someone on social media.

**Participant 7.** The following section summarizes the themes and patterns examined for Participant 7; a 22 year-old female who competes in fencing. She has competed in fencing for 13 years. On a national platform the athlete would presently rank herself as lower-mid level, but in terms athletes on the university team she would rank herself as one of the best.

**Salience.** Using social media as a way of catching up with the world is a theme that was described by the participant. It was also demonstrated how social media has been integrated into a person’s routine; checking it first thing in the morning and last thing at night. She also explained how everyone uses social media and that social media is needed to be kept in the loop. Interestingly she explained how social media is integrated into jobs, and that she has felt pressured to getting other social media accounts in order to be able to do her job better. That being said there was a theme that social media can be used to an athlete’s advantage if it is marketed properly. People post about
their accomplishments and achievements, but also that posts can be framed to be viewed more positively if people do not know the context of the post. She used the example of posting about winning a tournament that did not have many people entered in the division. From a sport-marketing perspective, it is noted that organizations do not like promoting their teams that are not successful. As such, the team has to be framed as successful without posting results; techniques such as high energy, demonstrating a positive/fun atmosphere, and cheering assist in framing less successful teams. Consequently, promoting one’s self as an athlete can be done similarly, utilizing a positive self-presentation might help with politics and favouritism in the sport. The participant also stated how she monitors with a purpose. She wants to know what people are doing and see how her opponents are training. In a recreational sense, she also said she monitors what other people are experiencing, and if there was anything that interests her she would become motivated to participate as well, so she can post about it. Interestingly, the participant admitted to adding people in the sport, who she does not talk to, on social media if she perceived them as a star; she may not have the opportunity to otherwise talk to them. In addition, by adding these “stars” on social media she can also monitor what they are posting and possibly learn from it. If she were to face them, or someone she perceived as a higher-level athlete, in competition she stated she would try and learn from them. Therefore, it might be easier for athletes to put their “stars” on a pedestal, which might affect the way they see themselves if they were in a match against their “star”. There was also an observation about face-to-face interactions in the sport. She reflected how the girl culture in sport can be passive aggressive, and that people tend to be nice to your face but become bitter when they observe an athlete succeed. Same as
social media, and this was evident in her explaining how she usually follows people she considers friends in her competition circuit. She said she would be caught off guard if she tried to add someone and they did not accept her request; that would motivate her to beat that opponent in the future. The participant also demonstrated how posts from her opponents could actually motivate her to go train. There is an observation, however, that opponents can make themselves appear more skilled and confident on social media. This seems to be done by posting frequently and framing their accomplishments. On the other hand, she mentioned by not posting accomplishments or rankings athletes also attempt to go under the radar and surprise opponents in future competitions. That is, by going under the radar athletes could change their style of fighting or become more in shape and catch opponents off guard in the next competition.

**Pattern.** There was a different theme that demonstrated the marketed version of social media. How an athlete or sport can get more acknowledgment from an audience if it is framed in the right way. For instance, people only posting their accomplishments or their successful results. There was also the theme that things should not be examined too deeply as you do not know how much truth is behind it, and that there are different ways of interacting with different people. Something that was mentioned, somewhat related to self-efficacy and social media, is the effects of politics and favouritism that occurs in sport; and that being a part of high performance sport is almost like a full-time job and takes a lot of time, effort, and expenses to promote one’s self.

**Participant 8.** The following section summarizes the themes and patterns examined for Participant 8; a 35 year-old male who competes in and coaches sport karate.
The athlete has been competing in sport karate for 28 years, and competes at an international level. He would rank himself as top 5 in his division.

*Salience.* This interview revealed 3 perspectives: a competitor’s, a business owner’s, and a coach’s. To start, the participant does not use social media, by choice, as he stated he is highly competitive and knows how it would affect him personally or how he would react on it. This choice could be because of the generation he is in and how he had to adapt to social media, as opposed to growing up with it. He also felt that there was a dilemma of interacting on social media. The dilemma being how people tend to add or follow people they do not like, and how he could not do that because he does not want to be two-faced. This could also be reflected in his character as an athlete; how he puts on an angry-mad persona, so people avoid him at tournaments, because he has a hard time being two-faced — being friendly with someone and then competing against them well. This two-facedness he related to people hiding behind screens instead of interacting with others face-to-face. Since interactions are not face-to-face, people can read into and twist the meanings of posts; thus, interpretation and context become important when using social media. The participant made a point that things will be twisted in a way that suits someone’s present mood and thoughts. He related to this in a business perspective, how it is easier to voice a complaint through social media because it is easier to do that when you’re not face-to-face. Interestingly, he acknowledged how social media has been helpful to his business because it is a source of advertising, and that print advertising is slowly dying. Therefore, using social media to promote a business is a fast and easy way to reach more people. Although he does not personally use social media, the participant thought that people use social media to be a part of something and that makes themselves
feel better. He discussed this is similar to a gym membership where a person may not use it, but they identify as being a part of the community; it becomes part of a person’s identity. Moreover, he observed that people use social media in a similar way that they use positive self-talk, by trying and build themselves up, but social media uses the acknowledgement of other people to help boost confidence. Even though social media does not personally appeal to the participant, he identified that it is a useful in teaching as well as preparing for a match. With social media an athlete can stream past videos, discover similar athletes who they can learn from, as well as learn new techniques. He mentioned that social media also allows an athlete to learn how their opponents fight, which is important in competition prep. With tournament-style combative sports athletes need to prep for more than one fight and being able to have access to information about multiple opponents may provide an advantage. However, there does seem to be a balance needed. The participant wondered if being in front of a screen for long periods of time could actually interfere with training or mess with one’s head. Starring at a screen could be taking up training time, or motivation to train, and therefore an athlete might not be training the way they should be. The participant mentioned that many professional athletes pay people to manage their social media accounts for this reason. That being said, social media can fuel an athlete’s fire. From a coach’s perspective, he mentioned that he can see the effects that social media has on certain athletes who become motivated from viewing opponents posts or responses on posts. He equated this to another source of media, a magazine, which he used to see his opponents’ ranks and articles on top competitors illustrating how they train and their favourite techniques to use. He stated that he would use that information to his advantage and use it as fuel to train, and that
social media can be used in a similar way. There was an interesting point that although social media can boost someone’s confidence it can also motivate other athletes, so the way one should use it depends on which way it will help them more. That being said, social media can crush people’s spirits as well. The participant used an example where one of the athletes he coached was successful at a tournament but read a negative comment online and lost motivation. The participant also initiated the debate about how social media impacts and motivates athletes that are talented opposed to athletes that are hardworking. That because talented athletes are able to succeed faster than hardworking athletes’ social media actually gives confidence boosts to the talented athletes that may not necessarily need it, possibly discouraging the hardworking athletes. In addition, there was the observation that social media gives too much feedback too quickly. Before social media people tested their skill based on how they did in a competition. With social media, athletes have the opportunity to view and compare themselves through opponents’ videos and posts; monthly feedback has changed into daily feedback. However, there is a lot of information to process on social media and the conversations, responses, or posts have a fast turnover. As a result, the participant mentioned that social media might be rewarding or crushing athlete’s ability too fast.

**Pattern.** Knowing yourself and how you would act with social media was a theme that appeared. It was also suggested that as an athlete social media plays on one’s confidence, as well as a person’s mood and motivation. For instance, fuelling someone’s fire or crushing someone’s spirits. Although, it is thought to be easy for people to post because they are able to hide behind a screen. Different themes arise as social media was viewed from a business standpoint. It was suggested that it was a way of promoting one’s
self or business, and also seeing what others are saying and using that to one’s benefit. However, for athletes and business, there is a quick turnover in posts that people gain quick feedback which may or may not be beneficial.

**Participant 9.** The following section summarizes the themes and patterns examined for Participant 9; a 38 year-old female who formerly competed in wrestling. Before her retirement the athlete had competed in her sport for 17-18 years, and competed at the international level. Ranking her own ability, the athlete would and recognize herself as the one of top 10 in the world in her division.

**Salience.** As a retired high-performance athlete, there was a different perspective in how to use social media. One of the biggest themes that she discussed was that, as an athlete, one needs to know their purpose when using social media, for example, her purpose was to be her best. With that purpose she was able to set principles and boundaries for herself when using social media. The participant brought up the idea of what the definition of a “friend” was, and how she will not add anyone on social media who she cannot follow up with. She used the example of coworkers in metaphor to her opponents, where you respect them, but you do not have to be friends with them. That being said, being a high-performance athlete at the highest level could be related to a full-time job. Her purpose directs her behaviour, and she explained that her biggest opponent is herself thus it was important to make sure that she was consistently self-improving. Therefore, monitoring opponents was not a concern for her, it became her job to know how and what her opponents were doing, and she used other outlets other than social media to do that. The participant mentioned that social media is a platform that allows her to check in and out when she has free time, and when she uses it she does not want to see
work. Consequently, she realized that social media is a tool; a tool that people use to connect with others, this could be because she has had to adapt to social media. With that, there was an acknowledgment that social media can be used in function or dysfunction. There are many benefits to social media; it could be used to express one’s self, and connect with others, and there is a choice to use it or not. There was also a sense that social media is overdone, in that it is not used as a tool or in function and ends up hurting instead of helping athletes. For instance, the participant stated that she believes in results and needs to see it, because anything can be taken out of context and overthought. Especially since many posts on social media are not accurate. She mentioned that since there is a choice to use social media or not, if an athlete is mentally derailed because of opponents’ posts that is the athlete’s own fault. She made an interesting point that she likes to post both her good and bad days on social media, because posting about the bad days helps her heal and get over it quicker.

**Pattern.** With the perspective that sport is a job, social media is a break from work as it could provide personal related information and let one “check out”. However, social media was also considered a tool that could be used for function or dysfunction, and it is up to the individual to choose how they will use it. It was suggested that if boundaries are set, and the purpose of using it is known, social media can be an asset. Interestingly, it was acknowledged that social media is fake and misinterpreted, therefore a theme mentioned was that it is important to look at results and not what people say they can do. It was also suggested that to avoid self-comparison the biggest opponent should be one’s self.
**Participant 10.** The following section summarizes the themes and patterns examined for Participant 10; a 22 year-old male who competes in wrestling. The athlete has been competing in his sport for 10 years, and competes on the university variety team but also at an international level. He would rank himself as top-tier in Canada and is competitive in the senior level of wrestling.

**Salience.** Sport is an interesting phenomenon as athletes can be friends with each other, and at the same time want to prevent the other from meeting their goal; because their goals may be the same. There are many sports that have a small community in which everybody ends up knowing each other closely. Consequently, when opponents move divisions, athletes can get a bit worried if they feel unprepared. The participant explained that using social media allows him the advantage of a passive kind of training that is separate from training with teammates; who can be opponents. In addition, social media has an international reach, so athletes can monitor what athletes in the same sport and division are doing throughout the world. This suggests that the sport might advance faster because there are more ways of learning techniques. As a result, adding more people on social media, as the participant suggested, enables more access to information an athlete can obtain. Regarding social media and its impact on athletes, the athlete agreed that social media can impact athletes, but stated it depends on the sport. With regarding the impact there was acknowledgement that social media helps with promotions, but if the sport does not use promotions then the most impact that social media would have could be people posting a picture or people posting about their accomplishments; such as when they’ve beaten another athlete. It was also led to believe that trash-talk is more likely to occur face-to-face than on social media. Yet, maybe social
media impact is more of a passive occurrence, since the participant had many examples where a social media post influenced his behaviour. One example he gave was a scenario about how it is a “mindfuck” when an opponent does better than him, even though he knows he could have beaten them. Social media contributes to the “mindfuck” by giving the sense of it being “real”. That seeing the visual representation, instead of just hearing about it, seems to make it more concrete. There was also the idea that people on social media are not blatantly going to target someone in their posts either. That the post could be to boost confidence but also subtly be arrogant and bring someone down; he admitted this could just be a personality factor. He also noted that using positive self-talk helps him avoid being distraught by other people’s posts.

**Pattern.** Opponents are known at a more personal level because the sport, as insinuated, is a tight-knit community. There was a theme that social media could be used as a tool to watch videos and gain intel of opponents that athlete’s do not train with. The more people that one follows one social media the more access to information there is. It was suggested that studying opponents on social media is a form of passive training. In addition, this particular athlete had no tolerance for arrogance, and saw social media affecting athlete’s as trash-talk or promotional tool and did not understand how social media could impact one as an athlete. It was also acknowledged, however, that it could be nice to see athletes in the same sport succeed. This demonstrated that he does see his opponents’ posts, and the emotional response that he endures from opponents’ post (his perspective of the arrogance) suggests there is some affect from social media on him.

**Phase 2 — Across Data Analysis; Cross-Interview By-Question**
To read for patterns, all interviews were inputted into a chart in order to see commonalities or “standalones” for each question. The following section presents a summary of the patterns and outliers found across interview questions. The following section presents the summaries from the interview guide questions, in clusters.

**Opening Question.** To start the interview, in your opinion, do you think that social media influences people’s success in sport? How?

**Salience.** One participant does not believe that social media has a negative influence on athlete’s success in sport, as long as the athlete understands how to use it properly. If the athlete does not know how to use social media as a tool to his or her benefit, it can be harmful. There were also a few participants that referred to the impact from an extreme point of view, where an athlete would trash-talk or post about their opponent intentionally to impact the opponent’s mental game.

**Pattern.** There is acknowledgement from all participants that social media has some kind of an effect on sport performance but are undecided what the effect is or how much social media can have an effect. Answers also demonstrate how the effect of social media can be both positive or negative. Many participants refer to the communication aspects of social media, and how it can help with promoting and framing athletes and their accomplishments.

**Cluster 1: Identifying What Level of Sport They Are, and Their Judgement About Opponents and Abilities**

This cluster was used to determine a sense of with what level of sport the athletes identified, and how the athlete viewed and ranked their own ability. During the interview, there were a couple of guidelines for the participant. They were asked to think of the
main competitive sport they presently participate in. They were instructed that there were a couple of “scenario” questions throughout the interview that may/may not have happened to them, but to answer the questions to the best of their ability. They were able to take their time answering the questions, but they were to try and think about how each of the experiences had impacted them within their present sport.

**Question 1.** Can you please give me your name, age, and main competitive sport you play?

*Salience.* Participants were distributed into three age categories: 18-23 (4); 24-29 (3); 30+ (3).

*Pattern.* n/a

**Question 2.** If there are any, what other sports do you play at a competitive level?

*Salience.* Two athletes were retired from their sport.

*Pattern.* All participants specialized in their sport. Any other sport that they participated was done recreationally, or was given up in order to specialize in the sport they presently participate in.

**Question 3.** What is the next level (i.e. division) of your sport?

*Salience.* One participant recognized as being in the highest level of their sport.

*Pattern.* Most participants recognized that there were a couple more levels that they could progress to in their sport.

**Question 4.** Do you want to progress further in your sport, and what would you have to do to get to that level?

*Salience.* One athlete admitted that they did not want to progress further in their sport because of political reasons in their sport.
Pattern. Almost all participants wanted to continue progressing to higher levels in their sport.

Question 5. Between the best athlete in your division, or even league, and the worst athlete in your division/league, where would you rank yourself?

Salience. n/a

Pattern. Two participants stated that they were the best athlete, but then immediately recognized that they were probably within the top-tier of athletes and recognized that there is always the possibility of losing to an opponent.

Question 6. If you were to face the best opponent in your division, how do you think you would do?

Salience. n/a

Pattern. All participants recognized that they might not win at the stage they are in right now, but that they would give the opponent a good match.

Question 7. Do you think you could become the best athlete in your division, or even sport? Why do you think that?

Salience. One participant did not think they could become the best athlete in the division because they started their career late.

Pattern. Most participants who had not already identified as the best athlete in the division thought that they could become the best athlete in their division, because of their mentality, work ethic, and resources.

Question 8. When you see someone in another division (“up and comer” etc.) of equal or more talent enter your division, what are you most worried about?

Salience. n/a
Pattern. The answers could be based on experience and/or confidence of the athlete, as the participants’ answers appear to coincide with their sense in ability. The athletes who regarded their ability as the highest would be focused on self-improvement because they regard their biggest opponent as themselves, and/or would try and help the up-and-comer. Athletes who ranked themselves as mid-to-high-range in ability expressed how they would be apprehensive to underestimate their opponent and would not want to be judged for losing. Finally, athletes who regarded themselves as lower-to-mid range in ability would use each match to learn and gain experience.

Question 9. How often do you see/interact with your opponents/competition/potential opponents outside of your sport?

Salience. There were some instances, such as varsity, where teammates are opponents and therefore they would have to interact with their opponents.

Pattern. Athletes admitted to rarely seeing their opponents outside of their sport.

Question 10. When you see your opponents/competition during competitions how do you talk/interact with them? (convers, avoid, not acknowledge etc.)

Salience. One participant used the metaphor of “coworkers” in a workplace. That is, there would be respect towards the coworker because they were in the same space, but it would not mean that there was a friendship.

Pattern. Participants stated that they would politely interact with opponents if they had to but have strategies to shift their focus or change their body language, so they do not get approached.
**Question 11.** This section was to see what level of sport you identify with, as well as your own judgement about your ability. Is there anything important that I should know about you as an athlete that I have not asked you yet?

*Salience.* n/a

*Pattern.* The participants that chose to answer recognized where their motivation was. There was a sense of self and how they identify as an athlete. One participant recognized how sport was not the main focus, one athlete stated he/she hated losing more than they like winning, and another athlete explained how he/she strives to be one’s best.

**Cluster 1, Alternative Answers: IF They Think They Are The Best Athlete**

Two participants identified as being the best athlete.

**Question 6.** Why do you feel that you are the best athlete in the league?

*Salience.* One participant referred to being able to not only perform but to coach others to success as well.

*Pattern.* Participants referred to consistency in performance.

**Question 7.** Tell me about a time where an opponent gave you a “run for your money”, since you have been the “one to beat”?

*Salience.* n/a

*Pattern.* Acknowledgement that there was always the possibility of losing (4 or 5 great competitors) but explained how it is how athletes approach a match and the opponent that would determine the win or loss.

**Cluster 2: Their Use/Opinion on Social Media**

This cluster was used to determine normal social media usage of the participant.

**Question 1.** With regarding social media, how often do you use social media?
Salience. n/a

Pattern. The people who do use social media, admitted using it daily.

Question 2. What social media sites do you use? What sites do you use most frequently?

Salience. YouTube was mentioned afterwards because many participants were not sure if it counted as social media but mentioned using it and regarded it as a tool in their sport.

Pattern. The big ones: Facebook, Instagram, SnapChat, Twitter.

Question 3/4. On what device (phone, computer, or both) do you use social media on? Which do you find you use it on more, and why?

Salience. A participant stated that they preferred the way the apps for social media look on the phone. An example of this was Instagram.

Pattern. All participants preferred to use social media on portable devices, such as a cell phone or a tablet, because of the availability/portability of the device (that they almost always have it). The exception was if they would have to use social media for work. If they had to use social media for work, they preferred to use their computer.

Question 5. Why do you think people use social media?

Salience. There was a mention to sport specific sites that are used to look up videos and information about their opponents.

Pattern. People stated that there was a sense of connection with people or being a part of something. On the other hand, participants mentioned that they use social media as a way to distract themselves or take themselves out of reality. Another common
answer was that social media is a fast and efficient way to keep up with people lives and updating people on their lives.

**Question 6.** What is appealing about social media to you?

**Salience.** One participant stated that social media is not appealing to him/her and that is why he/she choose not to use it.

**Pattern.** It was identified that social media allows participants to connect with people in a time effective way. In addition, participants recognized that social media allows for participants to see what others are doing, which can be used for entertainment purposes. It was also mentioned that participants use social media to gain knowledge as well as learn new skills. Many athletes acknowledged that they use social media for research purposes, such as learning about opponents, or using it to find game tape.

**Question 7.** Why do you feel encouraged to use social media?

**Salience.** From a business standpoint it was identified that much of the advertising is done on social media now as a business can reach more people, and demonstrates how print ad is slowly dying.

**Pattern.** There was a common answer for participants under the age of 30 that they would feel behind if they did not use social media.

**Question 8.** This section was to see what your patterns are on social media. Is there anything that I should know about your social media use that I have not asked you yet?

**Salience.** It was mentioned that social media, specifically YouTube, is used as a teaching tool.

**Pattern.** n/a
Cluster 3: Sport Specific Social Media

This cluster was used to see the social media use of the participant on an athletic specific level.

**Question 1.** What kind of news do you see on social media about your sport, or people performances?

**Salience.** One participant observed how social media had an effect on the athletes that he/she coached. That it had a negative and positive effect, but that the effect was based on what the athlete saw people talking about and posting.

**Pattern.** The range of information that people were able to see with social media, because there are no physical barriers, was a common answer. People observed how people tend to post positive results on social media. There was also a mention of seeing videos of other people on social media.

**Question 2.** In what instances, involving your sport, have you felt pressured to use social media?/What are the benefits that social media provides you as an athlete?

**Salience.** The only pressure that participants felt was if the athlete was connected to a business or stakeholder or were trying to promote themselves as an athlete. Otherwise participants did not feel pressured to use social media.

**Pattern.** Participants recognized that there were multiple benefits to using social media, such as promoting themselves as an athlete, and being in the know for future tournaments. Interestingly, many people mentioned how tournaments can be streamed through social media, so that the athlete does not have to be physically present to watch the outcome of a tournament.
Question 3. Who do you follow on social media, specifically social networking sites?

Salience. n/a

Pattern. Participants stated that they follow organizations related to their sport (communities).

Question 4. Why do you add/follow someone who you would not talk to in person?

Salience. The highest-level athlete strongly stated that they would not add anyone who was not their friend for safety purposes. How people could think that they know him/her because of some videos they’ve watched, but that not being a real connection.

Pattern. There was mixed feelings about this. Some participants were very against it, while others said they would add that person because they want to gauge themselves against that opponent, or because they idolize them.

Question 5/6. Why do you choose to follow your competition/opponents/potential opponents on social media? What is the purpose of following opponents or competition on social media?

Salience. The concept of “friend” had appeared a couple of times. It was unclear what people define as a friend (with the exception of one participant).

Pattern. The athletes stated that they follow opponents to keep up with what they are doing, and/or figure them out.

Question 7. I would like to give you a scenario. If you sent your biggest opponent a friend request and they declined it, how would that mess with your head?

Salience. n/a
Pattern. There were a couple of different reactions to the “rejection”. Some participants would take it to heart, while others said they would use it as fuel to train, or mentioned that it adds to the athlete’s confidence.

Question 8/9. What are your opponents’ social media patterns?/What kind of posts do you see from them (your competitors)?

Salience. n/a

Pattern. There was a note that it depends when the tournament season is. The answers were vague but fairly similar that it does confirm that participants see their opponents’ posts. It also demonstrated that posts range between life and sport related events. There was a conclusion that people post positive things about themselves, for instance things they have learned and things they have won.

Question 10. What is most frustrating when an opponent posts something about them training, competing or anything involving your sport?

Salience. There was one note about how seeing opponents’ posts were inspiring and motivational, and only made them want to train.

Pattern. Many people were frustrated when opponents build themselves up on social media. The examples ranged from an opponent bringing another athlete down to the opponent posting positive posts about themselves (training when people cannot, winning tournaments, etc.)

Question 11. If you were a spectator outside of the sport how, in your opinion, would their posts influence your perspective of their abilities?

Salience. Countering how results are the only accurate source to gage from, one participant pointed out that an athlete can have successful results but not have a
challenging tournament. The participant explained that if the spectator does not know the full context assumptions can be easily made.

**Pattern.** How you present yourself on social media in your sport impacts the way that outsiders view your skill. There were many answers that suggested that outside spectators do not know the context of the post, so when they see an abundance of comments and likes they can relate the positive post to an accomplishment and skillful thing. There was also mention that the way the posts are written eludes to what that person is like as a person; examples include intelligent and confident.

**Question 12.** In what way would their patterns on social media make you worry that they are getting better?

**Salience.** There was an interesting point that when an opponent posts about themselves, the post should be taken with a grain of salt, but when a second party posts about an opponent it seems to add legitimacy to the post.

**Pattern.** Participants stated that the frequency of posts, and the positivity of posts, about oneself emanates the impression that they are becoming more confident and as a result seems like they are progressing. The was another comment about how results speak for themselves, and how would the viewer of the post know if the poster was actually achieving what they say they are.

**Question 13.** I like using the phrase “[jargon appropriate for sport]” a lot. It is “an idea or concept that shakes one’s previously held beliefs or assumptions about the nature of reality”. How does social media create a “[jargon appropriate for sport]” for you, especially when you see or view your opponents’ posts?
**Salience.** There were two interesting points. One participant only thought “mindfucking” was successful if an athlete’s goal was to beat a certain person because of the social comparison tendency of social media. The other concept discussed was that social media provides an immense amount of feedback; to the point that one can be constantly reappraising self-efficacy and wasting time that could be used for training and self-improvement.

**Pattern.** There was an acknowledgment that nothing is as it seems, and that posts can be framed and edited so that the posters can appear better/happier/positive than they are.

**Question 14.** How does that make you feel about your own competence as an athlete?

**Salience.** One participant indicated how he/she could feel confident in his/her own ability but second guess how much growth their opponent might have had.

**Pattern.** Many participants reflected how they felt that they were not training enough or doing enough to better themselves.

**Question 15.** Keeping that in mind, what would you think if I said social media is a form of cheating?

**Salience.** n/a

**Pattern.** No participant confidently stated that social media is cheating. Most participants specified that it is not, while the others wanted to agree but were confused by the statement.

**Question 16.** This last section was to understand how social media influences your mental game. Is there anything important about your mental game, or
experiences/encounters with opponents on social media, that you may have thought about during this interview that you would be willing to share/add?

**Salience.** One participant recalled an incident where an opponent backed out of a fight because of how the participant portrayed themselves on social media. Another interesting point that was brought up by another participant was how social media affects developing athletes; the talent verses hardworking debate. It was implied that social media rewards the talented athletes because they get recognized faster, but the hardworking athletes do not get the same recognition from social media, which could be discouraging. Therefore, it was suggested that social media provides confidence boosts to people that do not necessarily need it and may discourage hardworking athletes to progress in the sport.

**Pattern.** The participants that did answer seemed to relate an experience to some of their previous answers.

**Phase 3 — Separating By-Question and Body, Space, Time, Relation Patterns**

The data were reviewed to determine if there were any patterns associated with body, space, time, and relation (bstr) since they can determine phenomenologically guided lifeworld categories. The following chart presents the themes found in the data for bstr categories, but the interpretation of the bstr categories will be discussed in Chapter 5.
### Body

**Age**
- The 30+ participants have adapted to social media, and have either learned how to use it or have set principles and boundaries for themselves so they can manage it without it taking over their lives.
- The 18-23 seem to have grown up with it so the use of social media seems normalized and a part of everyday life — they do not know life without it.
- 24-30 find it is uncommon not to have it, and that there are more benefits than negatives.

**Gender**
[Possible pattern; this could also be related to age]
- When men get a friend rejection they take it as a confidence boost.
- When women get a friend rejection they take it personally or become vindictive about it.

**Skill**
- Progressive learning: Lower experience/skill the more willing they are to learn from better athletes.
- People of high skill are more willing to help the opponents of lesser skill (helps improve the sport, will make them better in the long run).

**Personality Maybe**
- There was acknowledgment that the effect of social media might depend on who you are.
- How competitive are they? (the will to win “I hate losing more than I like winning”)
- What is the purpose (goals) of competing; what is their mindset (“my biggest opponent is myself”; could this be task/ego orientation?)
- Who are they competitive for (themselves, acknowledgement etc.)
- If you feel the need to post/not post

**Felt Sense**
- Athletes have a sense of their own ability (the athletes with higher ability admit that there are a group of elite athletes not just 1 best)
- Verbal persuasion has biggest impact here with regards to efficacy appraisal
- Scrolling through newsfeed influences how the athlete feels about their own ability
- (Or) scrolling through newsfeed influences how the athlete feels about their opponent’s ability
- “I feel shitty” “I should be doing something

### Relation

**Boost Confidence**
- Posts are not “aimed” at people; but photo and caption matter (context).
- Want to get acknowledgement/positive reinforcement from people.
- Likes and [positive] comments are a form of social support.
- May aid in being perceived favourably in the sport (ie politics).
- Blowing themselves up.
- Confidence is perceived as being related ability improvement.
- Form of positive self-talk (?)

**Results vs. Perceived Results**
- Seeing results makes it real; not just talking about it.

**The Source Matters**
- Second party/third party discussions/posts of people sometimes have more influence than the direct source.
- No say if someone posts/discusses about you.

**Identity (perceiving the other)**
- How people want to be perceived by people.
- People have the impression/sense that they know you.
- Hard to tell what is real and what is not.
- Acknowledgment that things are edited.
- Positive and more frequent posts suggest improving; which aids in second guessing (overestimating/underestimating) that person’s ability — this is applicable unless the athlete has set boundaries for themselves.
- More positive posts lead to the assumption that athlete is more confident.

**Mindfuckery (in regard to perceived ability)**
- Following most talented in sport assists in putting that person on a pedestal.
- Second guessing opponent’s ability by viewing posts (more likes, more frequent posts, second-party discussion etc.)
- Making fast assumptions about own performance (“If someone I can beat beats someone I can not beat I should be able to beat that person”)
- Social comparison can lead to doubt in ability.
- Quick turnover with feedback/conversation, more opportunity for efficacy appraisal and self-comparison; it is a lot of information to process; changing training because of
- "motivated to train" “want for acknowledgment” “doubt (second guessing ability)" “there could be more time and effort put into this”
- Looking for that positive feeling from acknowledgement from others (popularity purposes?)
- Sense of reward/accomplishment when friends “like” post
- Staring at screen can alter a person’s mood (?)

**Routine Based Use**
- Setting boundaries for yourself, and using it as an asset/tool
- Social media used first thing in the morning and last thing at night
- Being implemented into work; want to be better at work get social media

**Face-to-Face Interactions**
- Ways to avoid interactions with people (headphones)
- Passive aggressive; Girl culture is passive aggressive
- Being two-faced? Nice to your face but do not know what they are actually thinking; One participant chose not to use social media because they did not want to be two-faced
- Have the impression that opponents on the mat but friends off the mat
- Can understand tone and have body language/facial expressions for support

**Moral Dilemma**
- Wanting to be supportive of a teammate/friend but also wanting to see them fail; reassuring confidence and decisions in training and skill

**Identity**
- Part of the way people express themselves
- How they are perceived in public
- How losing looks to other people; also depends on who they lose to
- The effect of winning and losing on self (pride, identity, etc.)

**Self-Presentation**
- Playing the politics: making themselves look more favourable
- Prioritization of sport in life

**Use and Gratification Theory**
- Convenience Utility
- Information seeking

- Lots of subjectivity in posts (can interpret differently; need to know the context)
- People’s posts are mostly positive
- Focus becomes different (ex. on what people are saying not how you are improving)
- Opposite: there is the belief that not posting leaves that person under the radar and more likely to be underestimated in a match (advantage?)
- Using social media is not a form of cheating
- What are the coping techniques?

**Function/Dysfunction:**

**Monitoring leads to self-comparison**
- Depends on the person if it brings them up or brings them down (fuels fire vs crushes them)
- People typically like following/friending people in the sport and of higher skill (“heroes”); they're fans (think they are so far out of reach that they can not compare to each other)
- Not too many boundaries used here
- Lack of awareness (of how it affects themselves?)
- Gaging self in comparison to others — make sure there is not that shift (your self-rank stays the way it is); do not want to lose to someone new/not as good
- Purpose of monitoring is to keep tabs on people (gain intel)
- There is a shift in the way athletes are training; more monitoring (takes up time)

**Monitoring People for beneficial reasons**
- It is a tool, to be used to a person’s advantage
- Preparation — knowing what the opponent does (vs. fear of the unknown)
- Passive training
- Trying to figure that person out (personality etc.)
- Ideal for having to study more than 1 person (tournament structure)

**Different than Trash-Talk**
- People automatically think of trash-talking for social media to throw them or another athlete off their game.
- Subtly in posts; people able to be more passive-aggressive (consciously or unconsciously),
- Less of a filter (people hide behind a screen)
- Unless it is obvious (trash-talk) intention behind the post is not obvious
- People will interpret (and twist) things differently
### Social Dynamics
- How people interact in the real versus the not real
- What is a friend? Everyone's a friend (or workplace metaphor)
- There is internal conflict if the real and the not real do not match (“we talk in person, but they reject me on social media” vice versa)
- Able to hide behind a screen
- Social rules with social media (adding people to be polite/because they run in the same circles — feeling obligated)

### Social Media use in relation to Others
- There are individuals that think they use it differently (do not post, use it for their own benefit etc.)
- Do not think using social media affects them as much as others
- There’s no pressure to use social media but people question why you do not
- Hard to avoid using it
- Filtering what you want to/do not want to see (coping technique)
- Seeing other’s getting social support feels like a popularity contest (?)
- Let people know what’s going on in your life

### Relation to business
- Business have had to adapt to social media (print media slowly dying)
- Promote one’s self more easily (accessibility, branding, ways to measure progress — this can be applied to promoting self as an athlete as well)
- Having social media might help be more successful in jobs
- More easily measurable (how many people are viewing it, etc.)

### Hardwork vs. Talent (Coach perspective)
- Mention of early drop out/lack of motivation after seeing a negative post/not getting the spotlight
- Boosting the athletes that do not necessarily need to be boosted
- The acknowledgment/reward is being given too fast
- Stunting the sport? Changing the sport?

### Use and Gratification Theory
- Information sharing
- Convenience Utility
- Surveillance/Knowledge about others
<table>
<thead>
<tr>
<th>Space</th>
<th>Time</th>
</tr>
</thead>
</table>
| **Two different spaces: the real and the not real**<br>- The not real is much more of an influence on the real than vice versa.<br>- Go to the “not real” to get away from their “real life” (this includes boredom, stress relief)<br>- Compliments use and gratification theory<br>**Rather be somewhere else**<br>- taking oneself out of the current situation (in regard to competition distracting yourself from the external distractions)<br>**Host to sporting community (network)**<br>- Sport specific details (who’s winning, who’s placing)<br>- Conversations/discussions<br>- livestreams<br>- Watch what’s going on at tournaments without having to be there<br>- Acknowledgment of a small (“tight-knit”) community<br>- Want to be part of something (but is pretty cliquy)<br>**Interaction with people is different in real/not real space**<br>- Hide behind a screen<br>- The sporting environment seems supportive<br>- Pleasant to people’s faces (passive aggressive)<br>- Less likely to see someone’s (“scout someone”) if they are further distance away<br>**Function/Dysfunction**<br>- Taking yourself out of the “real” space with others to go on social media<br>- Not able to control what you see in that space<br>- To avoid talking to people, athletes use tactics such as music (headphones) — can using the phone separate athlete’s in the space as well?<br>- Type of teaching tool (Youtube); YouTube mentioned as being used as passive training/game tape<br>**Marketing Self**<br>- Identity: what you want to be perceived as<br>- Promoting self to being successful (relying on subjectivity outlook)<br>- Positive and “fun” posts — always looking happy<br>**Results**<br>- Real-time results vs. word (veterans have different mentality when it comes to this... they want to see it)<br>**Fear of Missing Out (FOMO)**<br>- “out of the loop” “behind with the times” “behind the times” “catching up”<br>**Not having enough time:** seeing other people training and not being able to train as much; higher level fighters hire people to manage social media<br>**Having too much time:** social media being used as time filler; monitoring people (passive training); Unaware of Time: On social media not noticing how much time has elapsed; check phone even though already checked it 5 mins ago (time seems to go by slow)<br>**Time in regard to competition:**<br>**Regretting Time Use**<br>- Rather be somewhere else (regret of not being at a competition)<br>- Not doing enough/overtraining<br>**Time leading up to tournament (Timing of posts)**<br>- Not training the way you want to (feel you should be doing something differently)<br>- Seeing a post motivates/demotivates<br>- When you view it and how this can affect the “felt-self”<br>- Can calculate how you want to interact on social media (strategic, does not have to be instantaneous)<br>- More sport-specific posts during the sport season<br>**Planning for the future**<br>- How to beat an opponent(s)<br>- Planning for future tournaments (training, competitions i.e. find out who’s going)<br>- Learning new things<br>- Going to do new things<br>**Function/Dysfunction**<br>- Using your time with others to go on social media<br>- Not living in the present (live-stream events, checking to see what else is happening)<br>- Stay in touch with people efficiently (send out general posts)<br>**Use and Gratifications Theory**<br>- Pass time<br>- Surveillance/knowledge about others
- People are believing more in posts on line as opposed to seeing it in real life.

**Not Posting**
- Staying under the radar
- Less stuff on the space (under the radar)

**Connection with people with little physical boundaries**
- Communication is quicker and always accessible
- Connection to higher level athletes — learn from each other

**Computer vs. Phone**
- Apps appear different on phone (ex. Instagram)
- Using computer for social media is associated with work, as opposed to phone which is recreational

**Use and Gratifications Theory**
- Relaxation (taking self out of situation)
- Social interaction
- Information seeking
- Passing time
- Entertainment
- Information Sharing
- Expression of opinion
- Surveillance/knowledge about others
Chapter Five: Discussion

The purpose of this study was to understand the impact that social media has on athletes’ self-efficacy. It was predicted that from viewing social media an athlete’s self-efficacy would be affected. Chapter Five will be used to discuss the findings in Chapter Four. Social Cognitive Theory (SCT) describes the dynamic relationship between the factors behaviour, personal (cognitive), and environmental factors. These three factors interact and influence each other, and as a result gives an explanation for human functioning and motivation. SCT explains that people are not driven by internal forces or shaped by their external environment, but are engaged in their own development (Bandura, 1986). As such, if social media is introduced into an athlete’s environment it should influence the athlete’s behavioural and personal factors, in this case self-efficacy. Therefore, it is important to understand social media and social media use — why people use social media — while looking at self-efficacy. It should be noted that some of the prevalent themes mentioned could be tied back to the Use and Gratification Theory, which identifies why people seek out media among competitors that fulfills their needs, leading to the ultimate gratification (Blumler & Katz, 1974; Swanson 1987). The study stayed loyal to its purpose, but some of the analysis was guided towards the Use and Gratification Theory, which illustrates how the habitual use of social media can have an effect on athletes and, in the case of this study, athletes’ self-efficacy.

The following section reviews the findings that relate to the effect that social media has on athletes’ self-efficacy. These findings were discovered through phase three of analysis — body, space, time, and relation (bstr)— of data analysis. Bstr categories were used as they are typically phenomenologically guided lifeworld categories.
**Body**

The body emphasis within analysis examines how the athletes’ tangible self (body) and other instrumental artifact aspects that relate to the body (for example, a phone) assist in answering the research question.

**Gender.** Males and females were included in the study to discover if a pattern was consistent across a heterogeneous sample. One possible pattern related to gender is the result of an opponent rejecting a friend request on a social media platform. Females appeared to either take the rejection personally and/or become vindictive in their future actions towards the opponent. Most males tend to take the opponent rejection as a confidence boost. That the opponent is dodging them, which they take as a confident sign that they are in their opponent’s head. This pattern could have also arisen based on the relationship with gender as well as age (to be discussed later).

**Skill.** All athletes identified as competitive high-performance athletes specializing in one sport. Even though this was the case, each athlete seemed capable of ranking themselves based on other athletes in their pool. The athletes that ranked themselves in anywhere but the highest skill level in comparison to their peers harnessed a progressive learning mentality, where they were interested in learning from the higher skilled athletes. The athletes that regarded themselves as the highest skilled athletes in the pool, unless the opponent was a threat to their ranking, they were more willing to help the opponents of lesser skill. Their mindset being that helping their opponents not only helps improve the sport but will also make themselves better as athletes in the long term.

This can be tied to self-efficacy appraisal through vicarious experiences. Vicarious experiences assist to reappraise self-efficacy through comparison to other
people (Bandura, 1997). Athletes are continuously presented with comparative information and rely on people with similar ability to them to use that information to gage their own ability and performance. Combative athletes rely more on vicarious experiences because of the subjective nature of combative sports; it is against an opponent and involves a referee. Comparison to opponents with more experience in a competitive environment can cause self-doubting in ability. People will also compare themselves to others with lower skill or people with skill beyond their ability that the comparison will not cause serious threats to their ability appraisal (Bandura, 1997). Therefore, in regard to progressive learning, it is logical that athletes who identify themselves in any group, but the high elite would use any opportunity against the high skilled opponent as a learning opportunity. It is also logical that the athletes who identify themselves in the highest level of ability are more likely to help the athletes who do not threaten their rank of ability.

Regarding athletes use with social media, it can be suggested through the Use and Gratifications theory that athletes who identify with lesser skill are more likely to use social media for information seeking purposes. As a result, there are more opportunities for this group of athletes to watch the athletes they deem as elite and try and learn from them.

**Personality.** Athletes acknowledged that the effect that social media has on an athlete might depend on who they are as a person, such as how competitive they are, what their purpose of competing is, if they feel the need to post or not, what their self-esteem is like, how sensitive they are to self-comparisons, etc. In the case of this study, the way
that social media has an impact on an athlete could depend on how low or high his or her self-efficacy level is.

**Felt Sense.** Felt sense is a concept that is derived from phenomenology where an individual is attempting to establish an engaged and revelatory attentiveness to an experience as it is felt, and not necessarily as it is cognitively or rationally understood.

Athletes have a sense of their own ability and are aware of which of their opponents they can compete competitively with; for instance, the higher ability athletes admit that there is a group of elite athletes and any one of them can win on any day. Persuasion is highly influential in this regard. When athletes scroll through their newsfeed it can have an influence on how they feel about their own, or their opponent’s, ability because the amount of exposure to other people’s lives has increased. Persuasion is commonly used to appraise efficacy because of its ease and availability (Bandura, 1977). It seems that the increased activity of staring at a screen may alter an athlete’s felt sense about their ability, and possibly their mood/motivation. Athletes have more opportunities to appraise their efficacy based on the frequency and positive nature of opponents’ posts, as well as the feedback they receive from their own posts. There are multiple examples from the data that demonstrate that athletes start doubting or second guessing their own, or their opponents’, ability based on the posts they view of their opponents. In addition, when an athlete posts on social media they are looking for feedback or that positive reinforcement, and acknowledgment, from others. It is mentioned that there is a sense of reward or accomplishment when they receive positive feedback from their peers/friends; like multiple “likes” on their post.
Face-to-Face Interactions. Interactions with opponents within the competition environment are different than the interactions with opponents through social media. With social media there is a screen between the sender and the receiver, while face-to-face interactions are real-time and innate. The athletes hold the impression that competitions are a mostly friendly environment, but it is also acknowledged that there is an underlying passive aggressive and two-faced culture that is rooted in a competitive environment. Perhaps this is because of the competitive nature of sport and the idea that opponents are friends off the mat but opponents on the mat. Concerning social media, if there are the polite face-to-face interactions but not as friendly interactions online it can create a mismatch in belief ("mindfuck") of what is happening. Vice versa: overly friendly interactions on social media verses less-than-friendly face-to-face interactions. Perhaps mastery experiences play a role in this mismatch in belief with athletes and social media. The athlete has previous experience with the opponent where they are nice/friendly to them in a certain space, and then the mixed belief occurs when there is a less-then-friendly interaction in another space.

Moral Dilemma. There is an internal interaction and conflict of wanting to be supportive of a teammate/friend but also wanting to see them fail. Perhaps having a close relationship with that person combined with the competitive nature of sport helps reassure confidence in one’s own ability when they see that person lose/fail. It is suggested that seeing a “friend” of the same or higher skill fail (or lose to a lower skilled athlete) enhances belief in one’s own mastery experiences.

Identity. Social media posts were related to an athlete’s perceived identity, that is, how social media use is part of the way that people express themselves or how they
want to be perceived in public. Regarding athletes and their athletic identity, there are a couple of concerns that were mentioned such as how losing looks to other people. This appears to also depend on to whom they lose to, for instance how people view their skill when they lose to someone they should have beaten. This could be associated to the effect that winning and losing has on identity (pride, self-worth, self-efficacy, etc.). The prioritization of one’s sport on social media was also mentioned as an identifier of identity.

**Self-Presentation.** Like organizations, athletes can use social media to make themselves appear favourable to the public, specifically to the judges in future performances. In previous research it has been demonstrated how social media allows athletes to optimize their self-presentation to the public (Sanderson & Hull, 2015). To my knowledge, there is no research on how self-presentation, particularly athlete self-presentation, on social media can influence the way that judges perceive the athlete, or how this can play a role in the politics involved in sport. From examining athletes’ answers in the present study there is a belief that self-presentation can have an influence in athlete success.

**Relation**

The relation emphasis of analysis examines how the athletes relate to the others outside of themselves. Whether that be to another individual or a concept (i.e. social media). This discussion section examines how the athletes’ relation with the other assists in answering the research question.

**Boost Confidence.** This section is based on the way that the athlete perceives the way their opponents or other athletes post about themselves. There was an observation
that when people post something on social media, the posts are not necessarily aimed at other people. Many posts about one’s sport are positive and self-focused. If an opponent tends to post frequently about positive things relating to his or her self it can be viewed as the opponent’s confidence increasing, as well as is related to thoughts of the opponent’s ability improving. There is also a sense that the poster wants to get acknowledgment and/or positive reinforcement from other people; however, the photo and caption matters. 

It seems that the photo and caption matter as it pertains to the way an individual views the post and provides context to the post and the poster’s objectives. Posts were described as a method of positive self-talk (boosting one’s confidence), or a coping technique of persuasion, but the individual is relying on people’s support to back-up the belief. It was acknowledged that lack of context could contribute to more support. Perhaps because the subjectivity of the post allows viewers of the post to jump to conclusions. As a result, the more people that like and write positive comments on the post the more positive reinforcement there is in the belief. It was mentioned that posting about the sport may aid the poster in being perceived favourably in the sport as well. There are two different reasons that persuasion is affecting self-efficacy. The first is receiving social support or persuasion from people to build confidence. The purpose of persuasion is the use of social influences to boost confidence in certain capabilities. This is demonstrated through multiple studies that use persuasion to enhance the belief in a person’s cognition (Matsui & Matsui, 1990; Luzzo & Taylor, 1994). Social media — being a platform that encourages and promotes the nature of positive persuasion — boosts athlete’s confidence through the feedback that athletes can receive on posts, such as “likes”. The second reason is that when an opponent posts about sport specific occurrences frequently and
positively, it creates and reinforces the perspective that he or she is improving. The frequency and positive strategy in posting, as well as an element of vicarious experience, might be the reason why an athlete becomes persuaded as it adds credibility and trustworthiness to the post.

**Social Dynamics.** There is a difference between the way that people interact in the real versus the not real space, and there is an internal conflict when the real and the not real do not align. Social dynamics are important to self-efficacy as social influences contribute to persuasion sources. If the way interactions to do align for the athlete this could create a mismatch in beliefs which could aid in questioning past experiences. Different to the real, in the not real (to be discussed in the “space” category) people are able to hide true intentions behind a screen. It is evident that the concept of “friend” is a grey area. Many of the athletes stated that they would only add people on social media that they would consider friends, however this includes many of their opponents which they state they only interact with at tournaments and the interaction is usually casual and friendly. That being said, there are social rules that go along with social media, such as adding people to be polite because they are well known or belong to the same communities; there is that feeling of obligation.

**Mindfuckery.** The study defined “mindfuck” as “an idea or concept that shakes one’s previously held beliefs or assumptions about the nature of reality”. Although playing with someone’s mind-game may seem wrong it was unanimous that social media was not a form of cheating, because everyone has equal opportunity to use or not use social media. Many athletes, however, seemed unaware of the effect that social media can cause. Posts on social media are prone to much subjectivity, and as such each post can be
interpreted differently as the context of a post is not necessarily transparent. Posts can lead to upwards social comparison, especially if posts that are viewed are subjective and positively framed. Social comparison can lead to doubt in ability as following talented athletes, especially the most talented in the sport, can assist in putting opponents on a pedestal. There is a consensus that the more frequent the posts are, the more “likes” the opponent receives, the more second-party discussions there are the more likely one is to second guess opponents’ ability. Perhaps it is because there is quick turnover in constant feedback (persuasion) and conversation, and therefore athletes are voluntarily under the constant influence of persuasion. As a result, there is an increased opportunity for efficacy appraisal. There is much more information to process and athletes are getting exposed to opponents’ framed lives that they would not see without social media. Athletes can also make fast false assumptions about their own performance based on the results that they view on social media. With the constant feedback viewed on opponents, training for a performance might become different and can change based on something that the athlete sees on social media instead of how they feel about their own performance. There is also a separate belief that if the athlete does not post anything about themselves on social media that it leaves them under the radar of their opponents, allowing them the possibility of the advantage of being underestimated in a match.

**Results vs Perceived Results.** Social media appears to add legitimacy to results. This is different from hearing it from another person, or just talking about it; seeing the results on social media makes it “real”. A “Seeing is believing” mentality. This is possibly dangerous when intertwined with persuasion, which is a way to encourage or discourage a person with a variety of techniques, in believing that then have, or lack, the
skills necessary to complete a task. If athletes begin to believe what they see on social media without knowing the full context they can begin to jump to conclusions or make false assumptions about their opponent’s, or their own, skill.

**The Source Matters.** The athletes acknowledge that social media allows athletes to post almost anything, therefore some sense and judgment is required to filter through the posts. There is one perspective that opponents’ posts about themselves should be taken with a grain of salt; it is only when second and third parties start posting or put a spotlight on opponents do the athletes get worried. It suggests that sometimes when an outside source posts they may have more influence than the direct source. Perhaps the source matters as it adds validation to the post. It is also noted that people do not need permission to post or discuss about athletes. This is interesting since verbal persuasion theory states that the verbal persuasion only works depending of the credibility, prestige, trustworthiness, and expertise of the persuader (Feltz, 1988). Therefore, if opponents’ own posts are not credible in the athlete’s eyes, then perhaps an outside party post does make the source credible, consequently having an effect on the athlete’s self-efficacy.

**Identity (Perceiving the Other).** There is the opinion that social media allows people to create an image for themselves of how they want to be perceived by others. This element of social media makes it difficult for people to distinguish between what is real and not real, even though there is an acknowledgment that things are framed and edited. People also tend to post positively on social media. The athletes’ have associated positive posts with an increased confidence level. In a sport setting, positive and frequent posts can indicate that opponents are improving. This can assist in second guessing one’s own ability, or the opponent’s ability, unless there is a coping mechanism used. In
addition, it is suggested that people who view posts from others — from the identity that they have created — have the sense, or are under the impression, that they know who that person is. It is speculated that the persuasion the opponent is using is to convince the athlete of the image that they are improving.

**Coach Perspective: Hardwork vs Talent.** Taken from a coach’s perspective, it was observed the effect that social media has on young athletes. The persuasion from social media, positive or negative, affected the motivation of the athletes. As young athletes are developing there are some that are prone to progress faster than others because their skills are based on talent, however that does not mean that the athletes that do not progress as quickly will not get to a high-performance point. It is suggested that through social media there is more attention that is given to the talented athletes, which can be discouraging to the hardworking athletes. From Luzzo and Taylor’s (1994) study it demonstrates that when people receive persuasion they gain confidence in future abilities to complete a task, compared to people who receive no persuasion. Similarly, social media is providing confidence boosts to athletes, but to athletes that do not necessarily need the support. In addition, the athletes that are lacking persuasion are observing other athletes receiving persuasion, which might be discouraging and affect an athlete’s motivation. In this case persuasion is used to boost the talented athletes, which may affect the hardworking athlete’s self-efficacy influencing factors in their thoughts and behaviour (like motivation) that influences their future performances. The acknowledgment and reward of succeeding could be provided too fast on social media, which could lead to early dropout for young hardworking athletes. This could change the progression of the sport and/or might stunt the sport in the long-term.
Space

The space emphasis of analysis examines the space in which the athlete surrounds themselves. This space can be physical or cognitive. The following discussion section examines how social media affects different spaces for the athletes, and how that might impact their self-efficacy.

Two Different Spaces: The real and the not real. Between a person’s life there are two different spaces, which are the real and the not real. The real is the space that a person is surrounded by, as in a physical context or setting, and is physically present in. The not real is the space that people use to get away from the real. The not real space helps people escape from aspects like boredom and stress from the real environment.

From participants’ answers it appears that the not real is much more of an influence on the real than vice versa. If there are two different spaces, and the experiences in each space do not align, there can be a mismatch of belief. With the addition of the increasing exposure to persuasion that can be received in the not real there is the possibility that athletes can begin to question their mastery experiences that they have developed in the real. These findings compliment Use and Gratification theory because it indicates why people might use social media. Taking oneself out of the present space can be tied to Use and Gratification categories like social interaction, information seeking, passing time, entertainment, relaxation, information sharing, expression of opinion, and surveillance/knowledge about others (Whiting & Williams, 2013).

Rather be somewhere else. People use the not real to take themselves out of the current situation they are in. In regard to competition, this includes distracting yourself from internal and external stimuli. Similar findings were determined in a study by Encel,
Mesagno, and Brown (2017) that examined if there was a relationship between an athlete’s Facebook use and sport anxiety. The results of that study found that Facebook impacted an athletes’ mental game by acting as a distraction from optimal psychological preparation and concentration on tasks during performance. This is relevant as it demonstrates that athletes use social media as a coping mechanism when faced with affective and physiological sources. Similar to Encel et al. (2017) findings, the present study demonstrates that not only could social media be a distraction from optimal psychological preparation and concentration prior to and during performance, but that the internal and external stimuli, from the real, creates the want of taking oneself out of the present situation which could be an indicator (or influencer) of low self-efficacy. That being said when an athlete is engaged in social media there is no control over what he or she views. Depending on what persuasion is viewed an athlete may become unconfident in his or her ability right before the performance.

Results. Results in the not real appear to be framed as well. In the real, an athlete would have to back up their boasting by demonstrating their skill in real-time. In the not real opponents can post things like highlight reels, that can frame the skills that they are performing as effortless — even if they cannot replicate the skills as easily. If athletes do not use discretion, they can be convinced that the opponent’s ability is better than it is from the not real, instead of seeing it in the real. Therefore, using the space in the not real can encourage the use of persuasion.

Time

The time emphasis within analysis examines how the concept of time is an influencer in the way that athletes use social media. The discussion section below
examines how time might have an effect on athletes’ social media use and how that may affect their self-efficacy.

**Generalized Time.** Through data analysis, the general concept of time in relation to athletes and their sport was a theme that was mentioned throughout the data. This was regarding not having enough time, having too much time, or having an unawareness of time.

**Not Enough Time.** There were several mentions that when viewing social media, the athletes would have issues with time management in balancing life and training. An athlete would look at social media and see an opponent posting about training and wonder how that opponent had the time to train so frequently. It was also observed that higher level fighters (like professionals) hire people to manage their social media to free up time for the fighter.

**Having Too Much Time.** Social media is being used as a time filler. Athletes are using more of their free time monitoring people on their social media, such as opponents. Many athletes describe this as passive training.

**Unaware of Time.** One theme that athletes frequently stated was that the sense of time was sometimes lost when using social media. This includes both spending time on social media and becoming unaware of the amount of time that goes by, as well as logging off of social media just to check it five minutes later. These are examples of how the feel of time affects athletes while on and off of social media.

**FoMO.** A theme that was mentioned by athletes throughout data analysis was the Fear of Missing Out (FoMO). FoMO is an implication from the use of social media but can also affect an athlete’s self-efficacy if viewed with a sport-oriented perspective.
There were concerns that one would be out of the loop of information so would use social media to catch up on other events that might be going on. FoMO is defined as the felt sense that others are possibly having rewarding experiences that one is absent from (Przybylski, Murayama, DeHaan, & Gladwell, 2013). Athletes may have FoMO if they feel they are being left out of sport-related experiences that may help progress — or engrain confidence (such as winning) in — their ability. Many of the themes that were found in this study are consistent with findings from a study completed by Przybylski et al. (2013) which examined how FoMO affects a person’s motivation, emotions, and behaviour. The findings indicated that FoMO tends to be a phenomenon impacting younger people. This is consistent in the present study, which found that the FoMO themes were mentioned in the athletes in the 18-23, and 24-30 categories. The following section describes how FoMO (and time) could be linked to athletes and their sport.

**Regretting Time Use.** Time is limited, and people have to makes choices about what experiences they want to engage in. With social media there is more opportunity to check in with opportunities that were missed because of other choices. In the present study one major time theme was the regret of use of time as a result of examining social media. There were many athletes who mentioned the feeling of rather being somewhere else, specifically regretting not going to a competition. In addition, participants expressed how they did not have as much time as their opponents to train, however this assumption was based on the evidence the participants viewed on social media. The data analysis also found that athletes would regret their time in training when examining social media, for instance, not training enough or feeling as if they over-trained. The present study is consistent with previous literature which found that FoMO was related to an elevation of
negative social and emotional states like boredom and loneliness (Przybylski et al. 2013; Burke et al., 2010; Lampe et al., 2007).

**Timing of Posts: Time leading up to tournament.** In analyzing the data for themes related to time, it was found that the timing of posts leading up to a competition mattered. There were mentions that there would be more sport-specific posts during the sport season, therefore athletes are susceptible to more sport-specific posts when they are in-season. Athletes stated how they would view posts from competitors and feel like they are not training the way they should have been. Viewing posts was also mentioned as being motivational or deflating to the athletes. Interestingly, this action of posting more before a tournament could be used strategically and become beneficial to the poster leading up to a tournament. There was not, however, specific mentions of how the feeling of “lack of time” in combination of increased posts from opponents made athletes feel (i.e. anxious) leading up to a tournament.

**Social Media as an Environmental Factor**

One of the prevailing themes that arose from the data were themes relating to the Use and Gratification Theory. The highlight of Use and Gratification Theory may be partially due to the chosen methodology, phenomenology, which emphasizes habit-based experiences that go unnoticed. While phenomenology emphasizes habit-based experiences Use and Gratification Theory provides a list of reasons (or habits) why people may seek out media. It was suggested, within the gap in research, that there is a greater opportunity for athletes to reappraise their self-efficacy because they are more susceptible to view their competitions’ posts. In regard to the present study, Whiting and Williams’ (2013) ten reasons indicate how athletes participate in persuasion through
social media. With the prevalence of social media, the Use and Gratification Theory expanded the categories to include social media (Whiting & Williams, 2013). There are ten categories to the Use and Gratification Theory: 1) Social interaction; 2) Information seeking; 3) Pass time; 4) Entertainment; 5) Relaxation; 6) Communicatory utility; 7) Convenience utility; 8) Information sharing; 9) Expression of opinion; 10) Surveillance/knowledge about others. Although the discussion heavily reviews how and why athletes use social media — an environmental factor according to the SCT — it is important to note that athletes’ social media use triggers their self-efficacy appraisal. It is also important to discuss the use of social media to argue how it is unreasonable — and starting to become unrealistic — to ask athletes to not use social media.

B**ody**

The body emphasis within analysis examines how the athletes’ tangible self (body) and other instrumental artifact aspects that relate to the body (for example, a phone) assist in answering the research question.

**Age.** Athletes’ age was divided into 3 groups (18-23, 24-29, 30+). The athletes who fall in the 18-23 category seem to have grown up with social media, and the use of social media appears to be normalized and adapted into their everyday life. The athletes who fall in the 24-29 category have made the observation that not participating in social media is uncommon, and that the benefits outweigh the drawbacks of having it. The 30+ category of athletes demonstrated the most difference between the age categories. Within the group, the athletes appear to have adapted to social media, as social media would be a phenomenon that would introduce itself to them later on in their life. The athletes have either learned how to use social media so that it will be a benefit to them or have set
principles and boundaries for themselves. The boundaries and principles assist in the balance of social media use so that it does not take over athletes’ lives or create any negative implications on them as an athlete.

The findings on age correlate with findings from education and communication research about digital natives and immigrants. It is important to acknowledge this type of research as it demonstrates the influence that social media has on different age groups. By understand the effect that social media has on age it aids in understanding the different ways that social media has affected athletes’ self-efficacy. Prensky (2001) uses the terms Digital Natives (DN) and Digital Immigrants (DI) to distinguish between the group (DN) that has grown up in the digital phenomena (i.e., computers, videogames, cell phones etc.) and the group (DI) that has adapted many or most aspects of the new technology. In the article it is suggested that DIs speak an outdated language in a world that is constantly evolving and being tailoring to the DNs. Regarding social media, it is similar in that as the world is evolving to tailor to the DN’s needs people have had to adapt in order not to be left behind. Athletes in the 30+ group have progressed through their sport without the influence of social media and have had to adapt to it. With adaption there is awareness of the effect that social media may have, which is one factor that the 30+ group of athletes benefit from. Not only are they aware of how to use social media, but they are also aware of how social media makes them feel when they use it, and therefore how to effectively use social media as a tool for themselves without it negatively affecting them or using it in dysfunction.

**Routine Based Use.** Through the use of phenomenological attunement, the data analysis demonstrates that social media has become a habit-based phenomenon. There are
multiple responses that suggest that social media is used on a day-to-day basis and has become convenient to have. In addition, it is also mentioned that social media is being instituted into jobs and work. Not only has phenomenology helped to disclose and acknowledge the routine use of social media, the idea of the routine use of social media correlates with Prensky's (2001) article that suggests that the world needs to adapt to the evolution of technology and DN to avoid being stunted or left behind.

**Use and Gratification Theory.** The data analysis revealed that there are many reasons that athletes use social media that are consistent with Use and Gratification Theory (Whiting & Williams, 2013). Out of the ten reasons why people use social media that the theory lists, two of the reasons — convenience utility and information seeking — were mentioned by athletes on how their social media use may relate to themselves (body). Convenience utility being that everyone has social media and that it would not be normal not to have it. Information seeking was also mentioned, in relation to body, because athletes would seek information from social media to better themselves in their sport. From the findings it could be considered that athletes that did not consider themselves as the most elite in the sport would use social media to seek information from the most elite athletes to learn from their skills.

**Relation**

The relation emphasis of analysis examines how the athletes relate to the others outside of themselves. Whether that be to another individual or a concept (i.e. social media). This discussion section examines how the athletes’ relation with the other assists in answering the research question.
Different than Trash-Talk. When asked how social media might affect success in sport, athletes initially reflected how it is a form of trash-talking in how it is used in an obvious way to throw another athlete off their game. In further investigation, social media use is not as obvious as trash-talking. There is subtlety in posts, and people are able to be — consciously or unconsciously — passive-aggressive. Unlike trash-talk, there is also much interpretation to each post, as the intentions behind posts are not obvious, but people will also construe each post differently. Trash-talking is a form of persuasion. Although it seems that trash-talking still occurs on social media, it is still a rare occurrence. None of the participants had experience with trash-talking but they could all relate to the way that social media affects them through other persuasive ways.

Function/Dysfunction. An observation was made by some athletes that social media can be an asset to the athlete, but it all depends on if the athlete uses it with function or dysfunction. The following section describes how social media can be used for or against an athlete.

Monitoring Leads to Self-Comparison. Through social media people are able to monitor opponents and view aspects of their performance and life that they would not otherwise see. Athletes typically follow/friend people in their sport of all skills, such as potential opponents or people they deem as “heroes” in the sport. The athletes stated that the purpose of monitoring opponents was to keep tabs and gain intel on them, but many also considered monitoring opponents as a passive type of training. This demonstrates that there is a slight shift in the way that athletes are training, as there is a monitoring aspect that utilizes more of athletes’ time. Monitoring can be dangerous as, depending on the age category of the athlete, there is a lack of self-awareness in how social media
affects the athlete and there are little-to-no boundaries typically set to prevent athletes from overusing the asset. The effect of monitoring can be different for each person depending on the person’s mindset; for instance, would viewing a post fuel the athlete’s fire or would it crush their spirits? Athletes also stated that they monitor opponents on social media to gage where their skill lies in comparison and making sure that there is not a shift in rank or that there are no surprises during the next match. There appears to be vicarious experience used in this aspect of persuasion, which could be due to the subjective nature that combat sports contain. With the vicarious experience factor that persuasion on social media contains, following the “stars” in the sport can be dangerous too. In a competitive sense, comparison with others who have more experience or who are regarded as more elite athletes, can cause self-doubting in the ability (Bandura, 1997). The theory of self-efficacy also suggests that athletes who are insecure about their ability avoid upward comparison because it threatens their self-esteem. As a result, they either compare themselves to athletes they regard to have lower skill or athletes beyond their ability that it will not cause any serious threat to their efficacy appraisal (Bandura, 1997).

*Monitoring People for Beneficial Reasons.* Social media is a tool and can be used to athletes’ advantage. Monitoring social media can be used as a type of passive training in preparation for a match to know what the opponent might do. It can also be utilized to understand what type of person the opponent might be, for instance figuring out an opponent’s personality to predict behaviour. Although boundaries still need to be set, this type of passive training could be ideal for a tournament structure competition where there is more than one opponent to compete against.
Social Media Use in Relation to Others. It is hard to avoid using social media, and athletes admitted that there was not any pressure to using social media, but it would be unusual not to. There were some people who adapted to social media better than others. There was also the impression by some athletes that social media did not affect them in relation to others. Despite that belief, unless boundaries with social media were set, there was an effect on the athletes. Similarly, there were athletes that believed they were using social media differently than others, such as specifically for strategy or would not post things on their social media accounts.

Social Media in Relation to Business. Through the interviews there was also a business perspective mentioned. Although the present study is interpreting how social media affects athletes and their self-efficacy, the business perspective was an interesting mention as it provides a metaphor for how the world has had to adapt to social media. In addition, there were several athletes that reflected how they required social media to promote themselves (like a business) as athletes. Businesses have had to adapt and expand into the social media market since print media is slowly dying. It is much easier to promote a business (and yourself) through social media. There is more accessibility on social media and better ways to measure progress, such as how many people are viewing the promotion. It was also mentioned that social media is being integrated into jobs, and that sometimes to perform better at work social media is required.

Use and Gratification Theory. The data demonstrate that there are a few reasons that athletes use social media in relation to others and the world that are consistent with Use and Gratification Theory (Whiting & Williams, 2013). The reasons can be tied back to information sharing, convenience utility, and surveillance/knowledge about others. The
athlete uses, or see opponents use, information sharing to post about themselves or the persona that they are trying to illustrate. The information that the athlete/opponent chooses to share about his or her self can be framed that allows others to perceive a skewed version of the athlete/opponent. Convenience utility, also mentioned in the “body” section, is important as athletes are aware that it would be unusual to not have social media in comparison to the rest of the world. Consequently, the idea to “not use social media if [that person] knows that social media affects them in a negative way” does become an inconvenience as social media becomes more omnipresent. Lastly, surveillance/knowledge about others is utilized by athletes by monitoring opponents and making sure they are mindful of what they are doing on a sport and personal basis. Although in Whiting and Williams (2013) study it was found that only 32 percent of people admitted using social media to watch and monitor others, the majority of the athletes in the present study repeatedly stated they would monitor their opponents to see what they were doing.

Space

The space emphasis of analysis examines the space in which the athlete surrounds themselves. This space can be physical or cognitive. The following discussion section examines how social media affects different spaces for the athletes, and how that might impact their self-efficacy.

Host to Sporting Community. Social media is a platform that is the host to many community groups. With sport, these community groups can provide details such as tournament schedules and details, but it can also provide information on the athletes that are winning, what tournaments they are winning, and who they beat (or who beat them).
These details can be instantaneous as many tournaments are starting to live-stream the
tournament online. As a result, if an athlete is unable to compete at the tournament, they
can still watch and monitor what occurs at the tournament without physically having to
be there. Discussions and conversations can take place in this community space, and the
data analysis demonstrates that these communities, that might seem distant and spread
out in the real, are described to be “tight-knit” communities. There was also an
observation that these social media communities are formed because people want to be a
part of something, and there was mention of groups forming within social media which
were described as being “cliquey”.

**Interaction with People is Different in Real/Not Real Space.** Through answers
from the athletes, it seems that the interactions that are with people differ in the real and
the not real. It is unclear why this occurs. Many of the athletes reported that the sporting
environment in the real seems supportive, and people are pleasant to people’s faces but
there might be some passive-aggressive behaviour. There was the suggestion that the real
and not real interactions are different because, with the interaction in the not real, people
are able to hide behind a screen.

**Distance.** Distance becomes less of a factor to interact with opponents. Without
the presence of social media if an opponent is at a further distance there is less of a
chance that the athlete will scout them. Meanwhile, in the not real, there is more
opportunity for athletes to monitor and interact with their opponents. With hiding behind
a screen in the not real, there is no way of knowing, or revealing, that someone is being
monitored. If this occurred in the real there would be major social implications.
**Function/Dysfunction.** Social media is an asset providing it is used properly. Within the data analysis it is suggested that athletes take themselves out of the real space, even if they are interacting with others, to interact with others in the not real or see what else is happening. This is consistent with the Use and Gratification (Whiting & Williams, 2013) theory which determines why people may use media, however the Use and Gratification theory does not determine why a person might seek out media when they are in a social environment. Constantly taking oneself out of the real to interact in the not real is arguably dysfunctional because it is not living within the present and enjoying the moment. Within sport this is sort of hinted at when athletes state that they have tactics at competitions, like putting on headphones, to avoid talking to and interacting with people; perhaps the use of social media through the phone can separate athletes from the competitive space as well. Although, that appears to be a strategy to avoid interacting with people in the real, there is no control of what appears in the not real. Consequently, the use of social media in this type of avoidance behaviour, with the appearance of it being controlled, can be dysfunctional. There are still ways that social media is functional. There were many athletes that implied that social media could be used as a teaching tool; YouTube was mentioned several times in this regard. Therefore, there are functional ways for social media use that are sport specific.

**Marketing Self.** It has been demonstrated that social media can be used in ways to promote oneself as an athlete, as well as one’s own team. There is the reliance on a subjective outlook from the observer. With identity, where a ‘persona’ can be framed to be perceived in a certain manner, social media provides a space that allows athletes the opportunity to promote themselves easily with no cost. Interestingly, it was proposed that
to get attention – especially if the individual or team is not very successful – the athletes must promote themselves in a positive and fun way; always looking happy (“they like the cheering”).

**Connection with People with Few Physical Boundaries.** One of the strengths that social media provides is that a person can communicate with others on a broader scale. As a result, communication is quicker and always accessible. Without barriers in the not real space athletes are able to connect to opponents as well as athletes that they regard as a higher level to them. With more connections there are more opportunities to learn from opponents as well as higher skilled athletes.

**Not Posting.** There is an opposite strategy that some athletes use in the not real. As opposed to posting about themselves or their achievements, there are athletes that purposely avoid posting in the not real. It seems that giving less information in the not real gives athletes the impression that they will fly under the radar of opponents.

**Computer vs Phone.** The way that an athlete uses social media depends on the device that the athletes use to access social media. It was mentioned that applications, like Instagram, allow the platforms to appear differently on the phone. In addition, the data analysis demonstrates that using the computer for social media in the real space is associated with work, while using a phone is more recreational.

**Use and Gratifications Theory.** Data analysis can tie the way athletes use social media to Use and Gratifications Theory (Whiting & Williams, 2013). The main implications in which athletes used social media, regarding space, were for relaxation, social interaction, information seeking, passing time (boredom within the space), entertainment, information sharing, expression of opinion, and surveillance/knowledge
about others. Many of the reasons that the athletes indicated in the Use and Gratification Theory were essentially used to take themselves out of the space/situation that they were surrounded by. Distance was also a factor, since it was apparent that athletes would be able to communicate with other athletes/friends they would not regularly communicate with because of the distance and the accessibility to them. Due to the nature of social media, the lack of physical boundaries and the adaptation to applications on phones, social media can transport athletes into the not real from any space. The lack of boundaries, however, could be causing dysfunction in the way that athletes are using social media in their lives.

**Time**

The time emphasis within analysis examines how the concept of time is an influencer in the way that athletes use social media. The discussion section below examines how time might have an effect on athletes’ social media use and how that may affect their self-efficacy.

**Planning Future Experiences.** The data analysis demonstrates how athletes would use social media to plan for the future. This includes strategy with tournaments as well as recreational experiences. There is evidence that athletes would use social media to learn how to beat a certain opponent. There would also be planning for future tournaments the athlete would attend, determining what opponents were attending as well as whether to train for it or not. With recreational experiences, athletes would see what others were doing on social media in order to decide if the experience was worth pursuing, that is if the experience would be interesting to learn about and if it would be worth posting on their social media platforms.
Time Function/Dysfunction. There is an overarching theme of function/dysfunction throughout the data which also effects the time emphasis of analysis. Throughout the time analysis, athletes would describe examples of routine-based use, checking social media first thing in the morning and last thing at night. There was also instances of how social media would distract athletes in their lives by checking out to see what other experiences were occurring (FoMO). This could include moments when the athlete is spending time with others to go check social media, but there were no obvious examples of this. However, social media was mentioned as a way for an athlete to efficiently use their time to stay in touch with people. This includes examples of sending out updates from tournaments to inform people on the athlete’s performance.

Use and Gratifications Theory. With the use of the Use and Gratification Theory presented by Whiting and Williams (2013) it is demonstrated how the time emphasis of analysis connects with athletes use of social media. The main reason found in analysis was that athletes use social media to pass time, this includes using social media as passive training and a way to surveil and monitor others. Consequently, with the time category there was the impression that time could be a negative factor in regard to social media, and how it affected the athlete. This could be demonstrated through the themes of feeling like there is not enough time, being unaware of time, as well as FoMO and the regret of time spent. Time is measurable, however, and does not speed up or slow down based on different scenarios that the athlete encounters; the way that time moves is based on how the athlete feels. Therefore, it could be suggested that the way that social media is used by the athlete does have an influence on the affective behaviour of an athlete.
Implications

The purpose of this research was to understand the impact that social media has on athletes’ self-efficacy. From the data analysis it can be concluded that when athletes view their social media there is an impact on their self-efficacy. It appears that social media encourages an idea or concept that shakes one’s previously held beliefs or assumption about the nature of reality. The study’s findings attempt to demonstrate the uncertainty, and the split between two spaces, that athletes are enduring because of social media. As a result, it might be suggested that from social media, and the persuasion that it employs, athletes lose confidence in their mastery experiences and begin to rely on what they view through social media, which hinders the self-efficacy appraisal.

From the data analysis there are some possible practical methods that could be used regarding athletes and their social media use, in order to prevent the athletes from reappraising their self-efficacy. It is not the usage of social media that is necessarily bad, it is the way that people take and interpret the information from social media and/or the way that social media is used in dysfunctional that creates issues. It is important for athletes to be aware of how they are using social media or be trained to use social media so that it is an asset to their performance instead of having an effect on their mental game. There are a few ways that athletes can achieve awareness. Through Social Cognitive Theory (SCT) it is suggested that self-regulation assists with the ability to monitor thoughts, emotions, and actions through the beliefs of that individual (Bandura, 1986). The self-reflective and self-reactive capabilities from self-regulation assist with controlling these thoughts, feelings, and motivations of a person’s actions (Bandura, 1991). From the analyzed data it can be speculated that the younger generation is not
exercising self-regulation, or their self-regulation capabilities have not been fully
developed, when using social media (or possibly in general). Self-regulation mediates the
influence of most external events and influences motivation and behaviour, but
dangerously if self-regulation is not utilized a person’s beliefs will be constantly shifting
due to external experiences (Bandura, 1991). One applied method that might assist in
self-regulation is exercising mindfulness while using social media. Being mindful is
using intense concentration on events that are occurring in the present (Hocevar, 2015);
being mindful while using social media would involve an individual being aware of their
present thoughts and emotions while navigating the not real.

Using the recommendation to not use social media is also becoming an
unreasonable suggestion. The world is quickly progressing in a way that makes it difficult
to avoid using social media, especially high-performance athletes. Therefore, having the
athlete understand his or her habitual use of social media to achieve some sort of
gratification will prevent unwanted effects drawn from social media. It is important to
acknowledge that athletes need to adjust to social media in order to use it as an asset in
their performance. One method of adaptation to social media may be having the athlete
be advised by an individual who is experienced and knowledgable of the impacts of
social media. A veteran athlete (the digital immigrant) who has experience with adapting
to social media could be a valuable mentor regrading social media and sport. Athletes can
also avoid the influence of social media by setting boundaries for themselves, for
example by not making social media part of their daily routine. That being said, coaches
and sport psychologists should also be aware of how social media can affect their
athletes, and if it is influencing the athlete’s motivation or performance. Consequently,
once athletes become aware of the effect of social media coping techniques can be executed to benefit the athlete.

**Recommendations for Future Research.** There are many research directions that can be examined based on the findings of the study, many of which can be determined based off the categories that are provided by phase three of data analysis (body, space, time, and relation). Data analysis demonstrated that social media has an impact on athletes depending on age, gender, skill, and personality, as well as the emotional states of the athlete. It would be interesting for future research to focus on each of these categories to understand how they are social media influenced, for example, how youth athletes (ages >18) use social media, or the extent in which they self-regulate when they use social media. Different sports should also be examined in regard to social media and athletes’ self-efficacy to determine if the effect that combat athletes are experiencing, in regard to social media, is the same or similar throughout different sports.

It would be interesting to investigate the effect of how participating actively in social media or choosing to be a passive participant. Although there was a lack of relationship between social media and trash-talking, Conmy et al. (2013) findings with the silent-talk and talk-silent could be transferable to a social media setting. It would be interesting to see if not being able to (or choosing not to) participate in social media in a competitive setting would generate consistent findings, that not participating in social media in a competitive setting would result in the athlete possessing lower self-efficacy.

Self-presentation factors should also be examined with athletes and their social media use. This can extend into marketing and promoting aspects of sport, and how different platforms of social media can assist in the politics of the sport and how that can
influence an athlete’s success in his or her sport. This could also relate to the influence that a certain source/poster could have in regard to an athlete’s career. It would be also be interesting to investigate how an athlete’s identity relates to sport and social media. Identity could be examined through how an athlete wants their image to be viewed, or how images on social media (fitspiration) influences the way the athlete aspires to be(come).

The combination of time and social media and the effect that athletes experienced was also an interesting finding. Future research should examine how the combination of time and social media has an effect on athletes’ emotional and stress states in regard to an upcoming tournament. In addition, it would be worth investigating how the time leading up to a competition and social media could have an impact on the training patterns on athletes.

Another perspective to examine is coaches’ perspective on how social media influences their athletes. This perspective naturally revealed itself during data collection but suggested that social media could have impact on youth retention in sport as well as the work ethic from the athletes. There might be other factors that arise from coaches’ perspective that were not revealed in the present study.

The real and the not real were also concepts that were examined during data analysis. The way that athletes act in the real was different than the way that athletes act in the not real. The social dynamics that social media encounters and encourages should be examined in athletes more closely between other athletes or groups. This would be interesting to investigate, especially in combination within the coach-athlete relationship.
of sport, and how that relationship may change or be abused with social media as the medium.
References

http://dx.doi.org.proxy.library.brocku.ca/10.1037/0022-3514.52.1.100


http://dx.doi.org.proxy.library.brocku.ca/10.1037/0033-295X.84.2.191


http://dx.doi.org/10.1080/02640414.2016.1186817


http://dx.doi.org/10.1123/ijsc.1.3.273


doi: https://doi.org/10.1515/jplr.2010.011


http://dx.doi.org.proxy.library.brocku.ca/10.1080/00332747.1956.11023049


http://dx.doi.org.proxy.library.brocku.ca/10.1080/02640410600630654


http://dx.doi.org.proxy.library.brocku.ca/10.1207/s15506878jobem4402_2


Appendix A

Interview Guide

To start the interview, in your opinion, do you think that social media influences people’s success in sport? How?

Identifying What Level of Sport They Are, and Their Judgement About Opponents and Abilities

Just a couple of guidelines before we start the “official” interview. I would like you to think of the main competitive sport you presently participate in. There are a couple of “scenario” questions throughout the interview that may/may not have happened to you, but keep thinking about your main competitive sport. You can take your time answering the questions, but I want you to try and think about how those experiences have impacted you within your present sport.

Can you please give me your name, age, and main competitive sport you play.

How long have you been participating in your sport?

How long have you been competitive in your sport?

How many times a week do you dedicate to training/practicing your sport?

How many times a year do you compete?

Approximately, what would you say is normal for your sport?

If there are any, what other sports do you play at a competitive level?

What is the next level (i.e. division) of your sport?

Do you want to progress further in your sport, and what would you have to do to get to that level?

Between the best athlete in your division, or even league, and the worst athlete in your division/league, where would you rank yourself?

If you were to face the best opponent in your division, how do you think you would do?

Do you think you could become the best athlete in your division, or even sport? Why do you think that?

(If they think they are the best athlete)

Why do you feel that you are the best athlete in the league?

Tell me about a time where an opponent gave you a “run for your money”, since you have been the “one to beat”. 

______ _______ _______
When you see someone in another division ("up and comer" etc.) of equal or more talent enter your division, what are you most worried about?

How often do you see/interact with your opponents/competition/potential opponents outside of your sport?

When you see your opponents/competition during competitions how do you talk/interact with them? (convers, avoid, not acknowledge etc.)

This section was to see what level of sport you identify with, as well as your own judgement about your ability. Is there anything important that I should know about you as an athlete that I have not asked you yet?

**Their Use/Opinion on Social Media**

With regarding social media, how often do you use social media?

What social media sites do you use?
  What sites do you use most frequently?

On what device (phone, computer, or both) do you use social media on?
  Which do you find you use it on more, and why?

Why do you think people use social media?

What is appealing about social media to you?

Why do you feel encouraged to use social media?

This section was to see what your patterns are on social media. Is there anything that I should know about your social media use that I have not asked you yet?

**Sport Specific Social Media**

What kind of news do you see on social media about your sport, or people performances?

In what instances, involving your sport, have you felt pressured to use social media?

Who do you follow on social media, specifically social networking sites?

Why do you add/follow someone who you would not talk to in person?

Why do you choose to follow your competition/opponents/potential opponents on social media?

What is the purpose of following opponents or competition on social media?

I would like to give you a scenario. If you sent your biggest opponent a friend request and they declined it, how would that mess with your head?

What are your opponents social media patterns?
What kind of posts do you see from them (your competitors)?

What is most frustrating when an opponent posts something about them training, competing or anything involving your sport?

If you were a spectator outside of the sport how, in your opinion, would their posts influence your perspective of their abilities?

In what way would their patterns on social media make you worry that they are getting better?

I like using the phrase “[jargon appropriate for sport]” a lot. It is “an idea or concept that shakes one’s previously held beliefs or assumptions about the nature of reality”. How does social media create a “[jargon appropriate for sport]” for you, especially when you see or view your opponents posts?

How does that make you feel about your own competence as an athlete?

Keeping that in mind, what would you think if I said social media is a form of cheating?

This last section was to understand how social media influences your mental game. Is there anything important about your mental game, or experiences/encounters with opponents on social media, that you may have thought about during this interview that you would be willing to share/add?
Appendix B

Informed Consent

Date: ——/——/——
Project Title: The impact of social media on an athletes’ self-efficacy

Principal Investigator (PI): Dr. Philip Sullivan, Faculty
Department of Kinesiology
Brock University
905 688 5550 x4787; psullivan@brocku.ca

Student Principal Investigator (SPI):
Elyse Gorrell
Department of Applied Health Sciences
Brock University
eg11gp@brocku.ca

INVITATION
You are invited to participate in a study that involves research. The purpose of this study is to understand how social media impacts an athletes’ perspective of his or her ability.

WHAT’S INVOLVED
As a participant, you will be asked to complete an interview about your experience as an athlete, and your view on social media in your sport. Participation will take approximately 40 minutes of your time.

POTENTIAL BENEFITS AND RISKS
There are no known or anticipated risks associated with participation in this study, however, if the participant feels uncomfortable answering any questions they are allowed to “pass” the question, or withdraw from the study. The results from the study may contribute to the scientific community/society, and may help the athlete realize the impact that social media has on his or her confidence.

CONFIDENTIALITY
All information you provide is considered confidential. The information you provide will be kept confidential. Your name will not appear in any thesis or report resulting from this study; however, with your permission, anonymous quotations may be used. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish.

Data collected during this study will be stored on a password protected computer and/or external hard drive. Data will be kept for 2 years after which time the data will be deleted.

Access to this data will be restricted to the PI, Philip Sullivan, and the SPI, Elyse Gorrell.

VOLUNTARY PARTICIPATION
Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study during the interview process and may do so without any penalty. Before the transcript is inputted for data analysis, the transcript of the interview will be emailed to you to review and consent to. You will be given 2 weeks to review the transcript; if we do not hear back from you we will assume that you have consented to the transcript and your data will be used in the study. Once you have given consent to use the transcript you will be unable to withdraw from the study.

PUBLICATION OF RESULTS
Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available from Elyse Gorrell at the email provided on the consent form. Feedback is anticipate to be available after December 31, 2017. The feedback will include an informal short summary of the study.
CONTACT INFORMATION AND ETHICS CLEARANCE
If you have any questions about this study or require further information, please contact Elyse Gorrell using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [insert file #]. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM
I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name:__________________________________________________________________

Signature:________________________________________________________ Date:___________________________