

**Depletion, Pride and Identification: Psychological Pathways to Student Engagement in
Canadian University Sport**

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Abstract

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Long trailing their American counterparts, Canadian university sports (USport) have experienced rapid growth in recent years, with new broadcasting deals generating national buzz. Of particular interest to sport managers is student engagement, which plays a key role not only in financial success but also in fostering long-term loyalty. However, research on behavioural intentions in sports has largely focused on prestigious, well-established teams and leagues. This trend extends to university athletics, where the NCAA continues to dominate scholarly attention. As a result, niche markets like Canadian university sports remain underexplored. Additionally, the concept of ego depletion has yet to be examined in relation to behavioural intentions in sports. Similarly, research on vicarious pride, a secondary emotion rooted in collective achievement, is underexplored in comparison to emotions such as happiness or sadness. In light of the rising popularity of USport, this study investigates the effects of ego depletion and vicarious pride, as well as the mediating role of team identification, on university students' behavioural intentions (information search, word-of-mouth communication, ticket purchase intention, social media engagement and, engagement in promotional content). An experimental research design was employed, using two online questionnaires to collect data. The results indicated no significant effect of ego depletion, or vicarious pride, on any of the behavioural intention measures. Additionally, team identification did not mediate the relationship between vicarious pride and behavioural intentions. As the first study to examine these variables within the context of Canadian university sports, this research adds to the limited body of literature in this area and offers several directions for future study.

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Introduction

Sport has long been woven into the fabric of society. Originally the domain of the elite, it has grown into a universal practice, watched or played by people from all walks of life (Kidd, 1996). While research has extensively examined the behavioural intentions of fans such as ticket purchasing, promotional engagement, and word-of-mouth communication, these studies have primarily focused on professional leagues and American college athletics. This leaves a significant research gap in our understanding of the psychological factors driving these behaviours within the context of niche markets such as Canadian university sports. Governed by U SPORTS, Canadian university sport includes 56 member institutions, 21 national championships, and over 15,500 student-athletes. Although visibility has increased through partnerships with CBC, TVA Sports, and digital platforms (U SPORTS, 2024), it still lacks the popularity and resources of U.S. college athletics (Danylchuk & MacLean, 2001; Greiger, 2013). As such, it cannot be understood through the same lens as larger, more commercialized markets.

Building on this gap, my thesis investigates how psychological factors influence behavioural intentions related to university sport in Canada. The primary goal of my research is to examine the effects of two under researched concepts on students' behavioural intentions toward university sports. The first concept is ego depletion, the idea that exerting self-control at "time A" will reduce the ability to exert it at "time B" (examined in Study 1). The second concept is vicarious pride, the feeling of pride for others achievement through collective identity (examined in Study 2). The second goal of my research is to understand why these effects occur by exploring the underlying mechanism, specifically the role that team identification, or the degree to which an individual identifies with a team, may play. By addressing these goals, my thesis aims to contribute to a deeper understanding of the unique dynamics shaping Canadian university sports and smaller markets in general.

Theoretical Background

Drivers of Behaviours in Large Market Sports

Over the past two decades, both sport management scholars and sports economists have placed significant attention on understanding what drives people to attend professional live sporting events. As the stakes in the sports industry have grown financially, socially, and culturally, so too has the importance of stadium attendance as a key metric of success. A

growing body of literature has identified a wide array of tangible and intangible factors that influence sport attendance. Tangible factors include stadium cleanliness, seating comfort, ticket pricing, location, and accessibility, practical elements that shape the spectator experience and impact the likelihood of return visits (Wakefield & Sloan, 1995; Hill & Green, 2000; Chahardovali et al., 2023; Simmons et al., 2018, 2021). Intangible factors encompass emotional responses such as pride, excitement, anxiety, and disappointment which have been shown to significantly shape fan behaviour (Foroughi et al., 2016; Foroughi et al., 2019). Game-related elements such as perceived match quality (Hyun et al., 2023), team performance (Simmons et al., 2018), and the “superstar effect” (Humphreys & Johnson, 2020) have also been found to influence spectators’ behavioural intentions. Finally, social-psychological constructs such as team identification, vicarious achievement, and the communal nature of sport have also been found to enhance both emotional involvement and future attendance intentions (Decrop & Derbaix, 2010; Kim & Mao, 2021; Hall et al., 2010).

In parallel, research on sport consumption and consumer behaviour more broadly has examined a variety of behavioural intention measures such as attendance, merchandise purchasing, media engagement (James & Trail, 2008), repurchase intentions, word-of-mouth communication, and consumer loyalty (Biscaia et al., 2013). Importantly, these behavioural intentions have consistently proven to be strong predictors of actual behaviour (Conner et al., 2000). Like professional sports, university sport literature is dominated by work on American university sports attendance. Of note, Simmons et al. (2018) identified key constraints to attendance at American college football games including time conflicts, disinterest, and accessibility issues. Lee and Bang (2011) explored how these constraints varied depending on NCAA division level and the degree of team identification, while Mayer et al. (2017) found that prior experiences with a sport shaped which constraints mattered most, especially in the context of women’s volleyball. Beyond logistical barriers, psychological outcomes have also been examined. For example, Wann et al. (2008) found that students who strongly identified with their school’s team reported greater self-esteem, a stronger sense of group belonging, and higher life satisfaction, with these effects being amplified by actual game attendance. Most recently, Simmons et al. (2021) conducted a large-scale study surveying over 23,000 students across 60 NCAA Division I schools to better understand what motivates or deters attendance. They found that constraint importance varied by market segment but overall, the four most important factors were ticket price, seat location, opportunities to socialize, and atmosphere.

Taken together, the research above highlights the importance of several drivers of behavioural intentions, both tangible and intangible, in large sport markets. Despite the existing research, less is known about behavioural intention in smaller sport markets, such as Canadian university sports. One important factor discussed in the next section is ego depletion. This psychological mechanism is especially important in student attendance due to the nature of a student's day.

Depletion on Behavioural Intentions

University sporting events have the potential to attract a wide range of audiences, including current students, alumni, faculty, and the family and friends of players. In my research, I chose to focus on students, as they represent a key target audience for sport marketers, particularly in the context of university sports and small-market teams. In these settings, building a loyal, on-campus fan base is crucial for long-term success as small-market teams, such as Canadian university sports programs, can especially benefit from leveraging students' sense of connection to their school to drive engagement and foster lasting support.

Given my focus on students, depletion stood out as being an especially relevant psychological construct to study as university students often juggle demanding schedules filled with classes, assignments, part-time jobs, and social commitments. These responsibilities require sustained self-control throughout the day, whether it is staying focused during lectures, resisting distractions while studying, or managing stress during exams. The cognitive effort required for academic performance, especially during exam periods of intense study sessions, can leave students mentally fatigued. To better understand how this factor may influence students' behavioural intentions, I next review relevant literature on depletion and conclude with the development of my first hypothesis.

The strength model of self-control, also known as the limited resource model, proposes that self-control operates like a muscle that becomes fatigued with use. According to this model, self-control relies on a finite internal resource that enables individuals to regulate thoughts, emotions, and behaviours (Hagger et al., 2010). When this resource is expended through prior acts of self-control, subsequent efforts requiring self-regulation tend to suffer, a phenomenon known as ego depletion (Baumeister & Bratslavsky, 1998; Hagger et al., 2010). In this view, exerting self-control in one domain temporarily reduces the capacity to maintain control in another, much like how muscles lose strength after repeated use

(Baumeister, Heatherton, & Tice, 1994; Baumeister & Heatherton, 1996; Muraven & Baumeister, 2000). Despite being a foundational theory in self-control literature, the strength model has faced substantial criticism in recent years. Some large-scale replications, such as Hagger et al. (2016), involving 23 labs and 2,141 replications, failed to replicate classic ego depletion effects. Others, like Carter and McCullough (2014) raised concerns about publication bias and overestimation of the effect size in earlier studies. In fact, meta-analyses applying corrections for small-study effects have found that the depletion effect might be close to zero (Carter & McCullough, 2014). These findings have led to a re-evaluation of ego depletion and prompted a shift toward more nuanced explanations.

In response to these criticisms, Inzlicht and Schmeichel's (2012) process model of ego depletion emerged as a compelling alternative. Rather than relying on the metaphor of a depleted resource, the process model attributes ego depletion effects to shifts in motivation and attention. Specifically, after exerting self-control, individuals become less motivated to pursue demanding "have-to" tasks and more inclined to seek out pleasurable, less effortful "want-to" tasks (Inzlicht & Schmeichel, 2012). This motivational shift is accompanied by an attention shift, in which individuals begin to focus less on cues related to self-control and more on stimuli associated with immediate reward or gratification (Inzlicht, Schmeichel, & Macrae, 2014). As a result, behaviours that require focus, planning, or social energy are less likely to be pursued when individuals are in a depleted state. While depletion may not directly lead to negative affect (Baumeister et al., 1998; Bruyneel et al., 2009), it can diminish social energy and enthusiasm to engage with others. It has even been shown to make individuals appear less active, friendly, talkative and overall, more passive (Baumeister et al., 2006).

Common behavioural intentions related to sport event attendance, such as seeking information, engaging in word-of-mouth, and purchasing tickets, could be considered as activities that demand effort. Specifically, information seeking is not something individuals do passively or unintentionally, it requires deliberate and attentive effort. In the context of sport event attendance, information search is unlikely to result in short-term, immediate reward. Similarly, word-of-mouth communication also involves deliberate engagement, considering that sharing opinions or recommending a product may require individuals to be socially engaged, and expressive. Finally, purchasing a ticket, particularly for an event that requires planning or delayed gratification, can be considered a forward-thinking behaviour aligned with longer-term goals. When individuals are depleted, their intention to perform these types of behaviours may decrease. Based on this, the following hypothesis is proposed:

H1: Participants in the depletion condition will report lower sport-related behavioural intentions compared to those in the non-depletion condition.

From Depletion to Pride

The initial objective of this research was to investigate the psychological factors that could impact behavioural intentions within the context of sport consumption. I proposed H1 because I believed that self-control, specifically depletion, could be one factor influencing behavioural intentions. However, findings from my first study, which will be detailed in a later section of this thesis, revealed no significant effect of depletion on behavioural intentions. In light of this result, the focus of my research shifted from depletion to another psychological factor, vicarious pride. This emotion remains relatively underexplored in the sport consumption literature despite its theoretical relevance. Vicarious pride represents a factor that may positively influence sport consumption behaviours due to its social identification properties. The following will provide an overview of both pride in general and vicarious pride.

Research on Pride

Unlike basic emotions such as happiness and sadness, pride is a self-conscious emotion that emerges from evaluative processes, both self-directed and socially contextualized (Tracy & Robins, 2007; Lewis et al., 1989). That is, pride may not only stem from personal success but also from the success of others, such as teams or groups with which one identifies (Nandy & Sondhi, 2022). Compared to basic emotions, self-conscious emotions have received limited attention in consumer behaviour literature and even less within the domain of sport (Decrop & Derbaix, 2010).

Pride is inherently multifaceted. On one hand, it can represent a healthy, genuine emotional response to effort and achievement; and on the other, it may be viewed as arrogance or hubris (Dickens & Robins, 2022). To address these nuances, Tracy and Robins (2007) proposed a two-dimensional framework of pride consisting of authentic pride (AP) and hubristic pride (HP). Authentic pride arises when individuals attribute success to internal, unstable, and controllable factors such as effort and perseverance (e.g., “I succeeded because I worked hard”; Tracy & Robins, 2007). This form of pride has been consistently associated with prosocial traits including conscientiousness, extraversion, self-efficacy, and positive affect, while being negatively associated with anxiety, depression, and loneliness (Dickens &

Robins, 2022). Authentic pride motivates individuals to strive for excellence and fosters respect from others through merit-based achievements. In contrast, hubristic pride is often associated with arrogance, narcissism, and self-aggrandizement (Tracy & Robins, 2007). This form of pride arises when individuals attribute their accomplishments to innate traits or abilities. Statements such as “I am successful because I am great” exemplify this mindset (Tracy & Robins, 2007).

Within marketing literature, pride has primarily been examined in contexts such as luxury branding and ethical consumption, while its application to sport marketing has remained largely underdeveloped (Decrop & Derbaix, 2010). Additionally, most studies have focused on pride in relation to tangible goods rather than experiential or service-based consumption such as sport events (Gordon et al., 2021). Yet, pride is a central psychological benefit sought by fans and has been validated as a key motivator of sport affiliation (Gladden & Funk, 2002), with growing recognition of its broader implications across consumer behaviour and brand strategy (Gordon et al., 2021).

Vicarious Pride in Marketing

In the sports marketing literature, a concept gaining traction is brand pride, defined as the experienced pleasure of being associated with a brand (Helm et al., 2016). At its core, brand pride emerges from perceived self-congruence with the brand (Nandy & Sondhi, 2022), by viewing the brand as part of one’s extended self (Kaur & Verma, 2023), or through shared affiliation within brand communities (Taute et al., 2017). Not limited to luxury or iconic brands, brand pride can be triggered by any positively evaluated brand (Kuppelwieser et al., 2011). A foundational contribution to brand pride in sport comes from Decrop and Derbaix (2010) who identified four dimensions of brand pride among fans of European football clubs: introspective, vicarious, conspicuous, and contagious pride. These emotional experiences shape how fans relate to teams and to each other. Notably, vicarious pride, the feeling of pride through others’ accomplishments, is particularly relevant to sport, where fans often celebrate their team’s success as if it were their own. This form of pride is collective in nature and rooted in broader identities such as culture, geography, or family (Decrop & Derbaix, 2010).

Taute et al. (2017) extended this framework to general brand communities, showing that consumers can experience pride in their brand affiliations similarly to how they experience pride in sports teams. Their work demonstrated that affiliation with a brand can

elicit all four dimensions of brand pride proposed by Decrop and Derbaix (2010), and that these emotional experiences can deepen brand attachment and even lead to brand defence behaviours. Nandy and Sondhi (2022) further conceptualized brand pride as a multidimensional emotion rooted in self-congruence, the extent to which a consumer views a brand as an extension of themselves. Finally, Nandy et al., (2023) categorized the four dimensions of brand pride into two distinct categories. Individualistic brand pride (I-BP) encompasses the introspective and conspicuous dimensions, and collectivistic brand pride (C-BP), encompasses the vicarious and contagious dimensions.

Several studies have highlighted consistent association of brand pride with loyalty (Lee & Kim, 2021; Decrop & Derbaix, 2010; Nandy & Sondhi, 2022), positive word-of-mouth (Septianto et al., 2020; Kim & Huang, 2021), and repurchase intention (Soscia, 2007; Nandy & Sondhi, 2022); the three core predictors of sport fans' behavioural intentions (Biscaia et al., 2013). However, these relationships are less established for vicarious pride. Unlike generalized positive affect, vicarious pride is characterized by a shared emotional response, even in the absence of any direct personal contribution (De Hooe & Van Osch, 2021). It is fundamentally a social emotion, drawing individuals into a collective identity through the accomplishments of others. Being a collective identity dimension of brand pride, it is the perfect dimension to study university students, who demonstrate an inherent identity congruence with their university sports team and other fans through the association with their school. As such I propose the following hypothesis:

H2: Participants who experience vicarious pride toward their university sports team will report higher sport-related behavioural intentions compared to those in the neutral condition.

Team Identification

At the core of vicarious pride lies the broader concept of team identification, a foundational element in Social Identity Theory. This theory posits that individuals derive part of their self-concept from the social groups to which they belong, alongside their unique personal traits and characteristics (Tajfel & Turner, 1986). In sport, team identification is a particularly powerful form of social identification, referring to the psychological attachment and emotional bond individuals form with a sports team (Wann & Branscombe, 1991; Wann, 2006). It involves a sense of emotional closeness and perceived oneness with the team and its

community, offering fans a sense of belonging and reinforcing their place within a broader social structure (Wann & Branscombe, 1991).

College students often form strong identification with university sport teams, as these teams symbolize not only athletic success but also institutional pride and a shared sense of community (Wann & Branscombe, 1993; Heere & James, 2007). Pride, and more specifically vicarious pride, play a central role in strengthening team identification, as it is experienced as part of a collective identity (Decrop & Derbaix, 2010). This is highlighted in Decrop and Derbaix (2010)'s research where fans of Racing Club de Lens equated being a supporter with being a native of the city, illustrating how deeply pride can intertwine with identity.

To measure this perceived connection, I employed an adapted version of Wann and Branscombe's (1993) Sport Spectator Identification Scale (SSIS), which uses seven items to assess the degree to which fans' self-esteem, emotional investment, and social belonging are tied to their team. Based on the research above, it is plausible to think that students experiencing vicarious pride through their university sports team will experience an increase in their perceived identification towards the team. Thus, the following hypothesis is proposed:

H3: Participants who experience vicarious pride toward their university sports team will report higher perceived identification with the team compared to those in the neutral condition.

Research has repeatedly demonstrated that identification is a central driver of fan behaviour. Specifically, Trail et al. (2000) identified team identification as a key motivator for sport consumption. Highly identified fans are more inclined to attend games, pay more for tickets, buy team sponsors' products, and purchase more team merchandise (Madrigal, 1995; Wakefield, 1995; Wann & Branscombe, 1993). They also generate positive word-of-mouth (Tuškej et al., 2013; Swanson et al., 2003). Notably, Rocha and Fink (2015) found that patriotism for national players significantly predicted stronger identification with the NBA, which in turn predicted increased purchase intentions for league-related products. This aligns with Decrop and Derbaix (2010) who observed that vicarious pride can transcend the sporting context, fostering connections to cultural, geographical, and familial identities.

Importantly, identification has also been shown to enhance fan loyalty even during times of poor team performance. Fans with high levels of identification maintain their support because the team becomes an integral part of their personal and social identity (Wann &

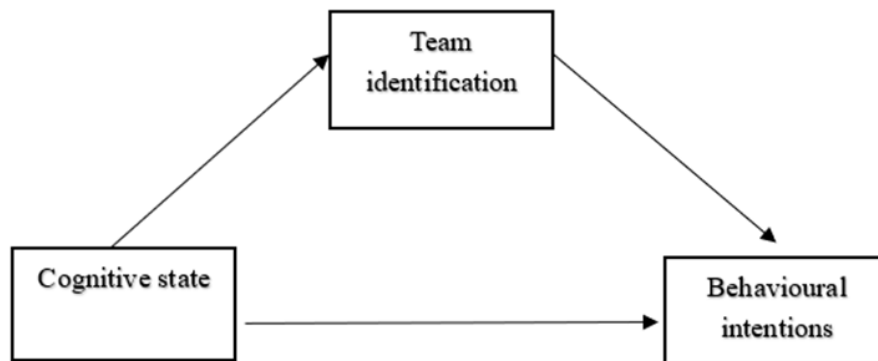
Branscombe, 1993). This is also true in the branding contexts where consumers who identify with a brand tend to perceive it as reflective of their own values and self-concept (Heere & James, 2007), and this identification leads to heightened commitment (Tuškej et al., 2013), loyalty (Wann & Branscombe, 1993), and satisfaction (Madrigal, 1995). Brand pride reinforces this process by enhancing the consumer's self-concept and solidifying emotional and behavioural loyalty (Nandy & Sondhi, 2022). Together, these findings suggest that identification serves as a critical psychological mechanism through which vicarious pride is transformed into meaningful behavioural intentions. The following hypothesis is therefore proposed:

H4: Team identification will mediate the relationship between vicarious pride and sports-related behavioural intentions.

Studies Overview

The four hypotheses proposed above were tested across two studies. The first study aims to establish the relationship between depletion and sport-related behavioural intentions, testing hypothesis 1. Study 2 shifted the focus away from depletion and towards vicarious pride. Specifically, the second study was designed to examine the relationship between vicarious pride and behavioural intentions (hypothesis 2), vicarious pride and team identification (hypothesis 3), and the mediating effect of team identification on vicarious pride and behavioural intentions (hypothesis 4); please refer to figure 1 for a conceptual model of this research. Since my thesis focuses on understanding sports-related behavioural intentions within the Canadian university context, I selected the Concordia Stingers football team due to my personal connection as a former player. Accordingly, I collected data for both studies from Concordia University students.

Figure 1.
Conceptual Model



Note: The cognitive state manipulated across the studies include cognitive depletion and vicarious pride. Specifically, study 1 examines the effect of depletion on behavioural intentions (information search, word-of-mouth and ticket purchase intentions) (H1). Study 2 tests the effect of vicarious pride on behavioural intentions (information search, ticket purchase intentions, engagement in promotional content, and social media engagement) (H2). Team identification is measured and tested as a mediator only in Study 2 (H3 and H4).

Study 1: Examining the Impact of Ego Depletion on Behavioural Intentions

The objective of Study 1 was to examine whether depletion reduces behavioural intentions compared to a non-depletion condition (H1). In this study, behavioural intentions were operationalized as the likelihood to look up information about an upcoming university sporting event, to engage in word-of-mouth about the upcoming university sporting event, and to purchase tickets for the upcoming university sporting event. I chose to focus on word-of-mouth communication and ticket purchase intention as they align with prior research highlighting the need to explore factors that drive fan behaviour in niche sport markets (Schreyer & Ansari, 2022). Given the low baseline of awareness for smaller market sport leagues, information search was included as a critical early-stage indicator of interest and future behavioural intention despite not being a traditional sport engagement metric.

Design and Participants

In this study, we recruited Concordia University students enrolled in COMM 223 (Marketing Management) and MARK 201 (Introduction to Marketing). Students in these courses are eligible to participate in research studies as part of a participant pool managed by the Department of Marketing, in exchange for course credit. Other than being registered in these courses, no additional inclusion or exclusion criteria were applied. Participants who agreed to take part in the study were randomly assigned to a condition in a one-factor

(cognitive depletion: depletion vs. non-depletion) between-subjects experimental design. The study was made available to 100 participants, however, only 81 participants completed it prior to the deadline.

Procedure

Participants were asked to complete four tasks in this study. In the first task, participants were told that the researchers were interested in assessing typing ability, and that they would be asked to re-type a short passage. In reality, the task was used to manipulate cognitive depletion. Participants in the cognitive depletion condition were asked to re-type the passage omitting the spacebar and letter e, whereas participants in the non-depletion condition re-typed the passage as seen. In both cases, the participants had up to two minutes to work on this task. This type of task has proven to be effective at inducing cognitive depletion (Maranges et al., 2017; Gregersen et al., 2017; Haynes et al., 2016). Following the depletion manipulation, participants were asked to evaluate the task in terms of perceived effort, mental demand, concentration, difficulty in resisting automatic typing tendencies, and overall task difficulty. These five items, adapted from Walsh (2014), Furley et al., (2023), and Haynes et al., (2016), were measured using a 7-point Likert scale (1 = “not at all” to 7 = “very much”). The depletion task can be found in Appendix A.

In the second task, participants were instructed to imagine themselves in a scenario that would be randomly selected from a set of 30 unique situations such as cleaning their living space, watering plants, or reading a book. They were told that they would be asked to indicate how they would react in the given scenario. This cover story was used to obscure the true purpose of the study, which was to assess participants’ behavioural intentions toward the Concordia Stingers. All participants were subsequently presented with a scenario where they were asked to imagine walking by a booth in the MB building which was promoting the upcoming Concordia Stingers football game. The booth was said to feature a large banner with a QR code inviting you to scan it for more information about the upcoming event and details on how to purchase tickets. Following the scenario, participants responded to three questions which measured their intention to engage in information search (“How likely are you to look up more information about the upcoming Stingers football game?”), word-of-mouth communication (“How likely are you to tell a friend or family member about the upcoming Stingers football game?”), and ticket purchase intention (“How likely are you to purchase tickets for the upcoming Stingers football game?”). All questions were answered using a 7-point Likert scale ranging from 1 (not at all likely) to 7 (very likely).

In the third task, participants were instructed to complete a short questionnaire intended to identify potential covariates relevant to the study. They responded to four items assessing their past attendance at university sporting events (“Have you attended a Concordia University sports event in the past, such as football, hockey, or basketball games?”), current involvement in campus activities (“Are you currently participating in any extracurricular activities or student organizations on campus?”), enjoyment of football (“How much do you enjoy football?”), and the extent to which they identify as a fan of university sports (“Do you consider yourself a university sports fan?”). All items were measured using a 7-point Likert scale ranging from 1 (not at all likely) to 7 (very likely).

Finally, in the last section, participants were first asked to provide demographic information. Specifically, age was measured by asking participants to write their age, and gender was measured by asking participants to describe themselves given the following options: male, female, non-binary/third gender, prefer to self-describe or prefer not to say. Next, participants were asked if they experienced any technical issues during the study, and if they did, they were asked to describe the issue(s) in one or two sentences. They were also asked if they thought the tasks were related, and if so, how. Participants were then given the opportunity to share any additional comments and given the option to withdraw their data (if participants chose to withdraw their data, they would still receive their course credits).

Results

Data Exclusion

Prior to data analyses, some participants were excluded from the study to ensure the validity of the data. The exclusion criteria was the following: (1) participants who failed to follow instructions (e.g., did not complete a task or wrote “nonsense” in the typing task), (2) participants who reported technical issues, (3) participants who correctly guessed the true purpose of the study, and (4) participants who asked for their data to be removed. Based on this set of criteria, I removed five participants for failing to follow instructions: three for writing “nonsense” in the typing task, and two for not completing the writing task. Two other participants had incomplete writing tasks, but I elected to keep them in the analysis as they were in the non-depletion condition, and I did not want to reduce the already small sample size. Re-running the analyses excluding the two participants in the non-depletion condition with incomplete writing tasks did not alter the pattern or significance of the results. No participants reported experiencing technical issues, and none guessed the true purpose of the

study. Finally, data from five other participants who asked to withdraw their data were excluded. Therefore, the final sample consisted of 71 participants: 28 male and 43 female participants with an average age of 20.77 ($SD = 2.08$).

Manipulation Checks for Depletion

I created a variable that assessed the extent to which participants felt depleted while performing the typing task (i.e., the depletion manipulation). The variable was based on the five items described in the procedure section (Cronbach's $\alpha = .90$). As expected, participants assigned to the depletion condition reported that working on the typing task was more depleting ($M = 5.35$, $SD = 1.03$) compared to participants in the non-depletion condition ($M = 4.18$, $SD = 1.30$) $F(1, 69) = 17.59$, $p < .001$).

Testing for Potential Covariates

For this study, four covariates were considered across all three dependent variables: past attendance, current involvement in campus activities, football enjoyment, and being a fan of university sports. First, past attendance was considered a covariate as it is a strong predictor of attendance decisions (Karg et al., 2021). Specifically, past experiences can shape future expectations and actions, as expectations are created based on experience of spectators (Coates et al., 2014). Second, current involvement in campus activities was considered as it can foster loyalty to the school, extending to its sport teams. In turn, team loyalty leads to attendance and revisit intentions (Wakefield & Sloan, 1995; Cho et al., 2019). Furthermore, emotional connections, socialization, and school pride also motivate attendance (Wakefield, 2016; Wang & Matsuoka, 2014; Rindinger & Funk, 2006), and these factors can be enhanced through involvement in campus activities. Third, football enjoyment was chosen as a covariate as research has found that sport interest is a determining factor for motives such as intention to buy and high levels of commitment (Silveira & Cardoso, 2019; Wang & Matsuoka, 2014). If someone has no interest in a sport, they are unlikely to engage with it. Oppositely, if they have great interest, they will be more likely to exhibit such behavioural intentions. Finally, being a fan of university sports was considered as a potential covariate. While examining the motivations of sports spectators to specific leagues, Mahony et al., (2002) found that factors including team loyalty, sports loyalty and community pride determined motivation. Furthermore, Correia and Esteves (2007) found that team affiliation plays a significant role in generating interest. Although the link between league affiliation

and behavioural intention is less clear, it is reasonable to expect that similar patterns observed with teams may also apply to leagues.

It was determined prior to data analyses, that if any of the correlations between the potential covariate and any of the three dependent variables had a significant p -value of less than .05 and a correlation of greater than .5 (indicating a moderate, or strong relationship), then the potential covariate would be further investigated. I next performed covariate analyses on each behavioural intention measure to determine if any covariates are present in study 1. The behavioural intentions tested were information search, word-of-mouth communication, and ticket purchase intention.

Information search. To determine whether any covariates should be included in analyses involving information search, I first examined the relationships between information search and the four potential covariates: past attendance at a Concordia University sports event, current involvement in campus activities, identification as a university sports fan, and enjoyment of football. A series of Pearson correlation analyses were conducted to assess these relationships. Results indicated that although the correlation between past attendance at a university sports event and information search was statistically significant ($r = -.24, p = .041$), the strength of the relationship was very weak. The results of the second analysis showed that the relationship between current involvement in campus activities and information search was not significant ($r = .12, p = .326$). While the correlation between identifying as a university sports fan and information search was significant ($r = .40, p < .001$), the strength of the relationship was weak. A similar pattern was observed for enjoyment of football ($r = .43, p < .001$). Based on this set of analyses, no variable demonstrated a strong enough relationship with information search. Therefore, no covariates were included in subsequent analyses involving information search.

Word-of-mouth communication. I next conducted a second set of Pearson correlations using the same set of potential covariates outlined above to determine whether they should be included in the analyses involving word-of-mouth communication. The results show that although the correlation between past attendance at a university sports event and word-of mouth-communication was moderately significant ($r = -.21, p = .086$), the correlation showed little evidence of an actual relationship between these variables. The results of the second analysis showed that the correlation between current involvement in campus activities and word-of mouth communication was not significant ($r = .05, p = .710$). While the correlation between identifying as a university sports fan and word-of-mouth communication was significant ($r = .41, p < .001$), the strength of the relationship was weak.

However, there was a moderate, significant relationship between word-of-mouth communication and enjoyment of football ($r = .54, p < .001$). Given this, additional analyses were conducted. The results of a first ANOVA yielded a nonsignificant effect of depletion on football enjoyment ($F(1, 69) = 1.416, p = .238$), indicating that there were no differences among the depletion conditions on football enjoyment, passing the homogeneity of variance assumption. Since this condition was met, an additional ANOVA was conducted yielding a significant effect of depletion $\times$ football enjoyment on word-of-mouth communication ($F(1, 67) = 5.293, p = .025$), meaning that the assumption of homogeneity was not met, thus, this variable is not to be included as a covariate. Taken together, this indicates that no covariates were necessary in subsequent analysis for word-of-mouth communication.

Ticket purchase intention. I ran a final set of correlational analyses, this time to determine whether any covariates should be included in my analyses involving ticket purchase intention. The results show that although the correlation between past attendance at a university sports event and ticket purchase intention was statistically significant ($r = -.40, p < .001$), the correlation showed little evidence of an actual relationship between these variables. The result of the second analysis showed that the correlation between current involvement in campus activities and ticket purchase intention was not significant ($r = -.03, p = .838$). Taken together, this indicates that both past attendance and current involvement in campus activities were not necessary to include in subsequent analysis of ticket purchase intention.

The results of the third analysis, however, showed a moderate and significant relationship between identifying as a university sports fan and ticket purchase intention ($r = .57, p < .001$). Thus, additional analyses were conducted. The results of a first ANOVA yielded a non-significant effect of depletion on being a university sports fan, ($F(1, 69) = 0.873, p = .353$), this means there were no differences among the depletion conditions on identifying as a university sport fan, passing the homogeneity of variance assumption. Since this condition was met, an additional ANOVA was conducted yielding a non-significant effect of depletion $\times$ university sports fan interaction on ticket purchase intention, ($F(1, 67) = 0.449, p = .505$). Given that the assumption of homogeneity was also met, identifying as a university sports fan was included as a covariate in subsequent analyses involving ticket purchase intention.

The results of the fourth analysis revealed a moderate and significant relationship between football enjoyment and ticket purchase intention ($r = .67, p < .001$). Accordingly, further analyses were conducted. The results of a first ANOVA yielded a non-significant

effect of depletion on football enjoyment ($F(1, 69) = 1.416, p = .238$), indicating no differences across depletion conditions, thereby satisfying the assumption of homogeneity of variance. Given that this assumption was met, an additional ANOVA was conducted, yielding a nonsignificant effect of depletion $\times$ football enjoyment interaction on ticket purchase intention ($F(1, 67) = 0.288, p = .594$). Since the assumption of homogeneity was met, football enjoyment was included as a covariate in subsequent analyses involving ticket purchase intention.

Effect of Depletion on Information Search, Word-of-Mouth Communication and Ticket Purchase Intention

Information search. I conducted a one-way ANOVA to analyse the differences in participants' information search intentions as a function of depletion. Depletion was included as the independent variable (0 = non-depletion and 1 = depletion), and information search intentions (continuous) was entered as the dependent variable. The results revealed no significant effect of depletion on information search ($F(1, 69) = .68, p = .414$). This indicates that there was no difference in the likelihood of looking up information between participants in the depletion condition ($M = 2.71, SD = 1.73$) and those in the non-depletion condition ($M = 2.39, SD = 1.61$).

Word-of-mouth communication. A separate one-way ANOVA was then conducted to analyse the differences in participants' word-of-mouth communication intentions as a function of depletion. Depletion was included as the independent variable (0 = non-depletion and 1 = depletion), and word-of-mouth communication intentions (continuous) was entered as the dependent variable. The results revealed no significant effect of depletion on the likelihood to engage in word-of-mouth communication ($F(1, 69) = .12, p = .725$). This indicates that there was no difference in the likelihood of engaging in word-of-mouth communication between participants in the depletion condition ($M = 2.57, SD = 1.69$) and those in the non-depletion condition ($M = 2.72, SD = 1.91$).

Ticket purchase intention. I conducted an ANCOVA to analyse the differences in participants' ticket purchase intentions as a function of depletion. Depletion was included as the independent variable (0 = non-depletion and 1 = depletion), ticket purchase intention (continuous) was entered as the dependent variable, and football enjoyment and fan of university sports were both entered as covariates. The results revealed no significant effect of depletion on ticket purchase intention ($F(1, 67) = .60, p = .440$), indicating that there was no

difference in ticket purchase intentions between participants in the depletion condition ($M = 2.08$, $SE = 0.18$) and those in the non-depleted condition ($M = 2.28$, $SE = 0.18$).

Discussion

Overall, the findings of study 1 do not support hypothesis 1, stating that participants in the depletion condition will report lower sport-related behavioural intentions compared to those in the non-depletion condition. Specifically, there was no significant effect of depletion on the likelihood to look up information, the likelihood to engage in word-of-mouth and the likelihood to purchase tickets for the upcoming university sports event. Based on these results, the focus of study 2 shifted from depletion to vicarious pride. Given its social and identity-based nature, vicarious pride is well-suited for the university context, where students often use school sports events as opportunities to socialize, connect with peers, and share in their school's achievements.

Study 2: Examining the Effect of Vicarious Pride on Behavioural Intentions and the Mediating Effect of Team Identification

Based on the results from study 1, study 2 shifted focus away from depletion and towards vicarious pride. Specifically, the study aimed to test the relationship between vicarious pride and behavioural intentions along with the mediating effect of team identification on these variables (hypothesis 2, 3 and 4). In study 2, I added engagement with promotional content and social media engagement as behavioural intentions along with the information search and ticket purchase intention measures in study 1. These measures were included to capture loyalty, an important indicator of repeat engagement.

Design and Participants

Like study 1, participants were recruited from the participant pool managed by the department of Marketing. Students who consented to participate received course credit in exchange for their participation in the study. The study employed a one-factor (vicarious pride: pride versus neutral) between-subjects experimental design, and participants were randomly assigned to one of the two conditions. Also, like study 1, the target sample size for this study was 100 participants; however, data collection closed prior to reaching this target. In total, 81 participants completed this study. Participants who completed study 1 could not participate in study 2.

Procedure

Participants were asked to complete five tasks in this study. In the first task, participants read a short story and were told to imagine the events happening as vividly as possible. This task was used to manipulate vicarious pride. Specifically, participants in the neutral condition read a story about a weekend with a small group of friends on a quiet afternoon, whereas participants in the pride condition read a short story designed to evoke vicarious pride towards the Stingers football team (see appendix B). Immediately after reading the story, participants were presented with two attention check questions to ensure that they were engaged and attentive while reading the short story. Participants in the neutral condition were asked: (1) “In the story you just read, did the small group of friends walk to a nearby café?” (2) “In the story you just read, did the small group of friends stay for about an hour?”. Those in the pride condition, however, were asked to answer these two questions instead: (1) “In the story you just read, did the Concordia Stingers start the season rough but then fight back to deliver two back-to-back wins?” (2) “In the story you just read, did the Stingers win in the semi-finals?” Both sets of questions used a yes/no scale. Following the two attention check questions, participants were asked to answer two other questions, based on Septianto et al. (2018)’s pride scale, to ensure that the pride manipulation was successful. This scale consists of 2 items; “how happy did the story make you feel because of what was achieved?” and “how proud did the story make you feel because of what was achieved?”. Furthermore, “how positive did you feel after reading the story?” and “how pleasant did the story make you feel?” were used to measure the level of positivity of both the neutral and pride scenario. All 4 items were measured using a 7-point Likert scale ranging from 1, “not at all” to 7, “extremely”.

In the second task, I told participants that I wanted to understand how much they identified with the Concordia Stingers football team. Participants’ identification to the Stingers was measured using an adaptation of the well-established Sport Spectator Identification Scale (SSIS) (Wann & Branscombe, 1993), consisting of 7 items with questions such as “How important to you is it that the Stingers football team win?”, and “How strongly do you consider yourself a fan of the Stingers football team?”. An 8-point Likert scale was used for all items ranging from 1 (not/never) to 8 (very). A mean identification score was calculated by averaging responses across the seven items for the Concordia Stingers (Cronbach’s $\alpha = .90$); refer to appendix C for the complete set of items.

The third task was used to measure participants' behavioural intentions. As such, a Stinger Football Instagram post was presented to participants. The Instagram post featured a sky view of the Stingers Stadium and featured the following message "<https://stingers.ca/> Click the link to learn more about Stingers Football, enter a contest for free tickets and merch, and buy tickets for the upcoming game" (see appendix D). Following the Instagram post, participants responded to four questions intended to measure the behavioural intention items of information search ("Based on the post you just saw, how likely are you to click on the link in the post to learn more about the Stingers football team?"), engagement with promotional content ("Based on the post you just saw, how likely are you to click the link on the post to enter a contest to win free tickets and Stingers merchandise?"), ticket purchase intention ("Based on the post you just saw, how likely are you to click on the link to purchase tickets for a Stingers football game?"), and social media engagement ("Based on the post you just saw, how likely are you to like the post, comment on the post, share the post"). All items were rated on a 7-point Likert scale with 1 being "not at all likely" and 7 being "very likely".

In the fourth task, participants completed the same task used in Study 1 (see Task 3 of study 1) which was designed to identify potential covariates relevant to the study (i.e., past attendance, current involvement in campus activities, football enjoyment and fan of university sport). Task five consisted of the same demographic, technical issues and debriefing feedback questions as study 1. Consistent with study 1, it also provided participants with the option to withdraw their data.

Results

Data Exclusion

Prior to data analyses, some participants were excluded from the study to ensure the validity of the data. The exclusion criteria were as follows: (1) participants who failed to follow instructions (e.g., did not complete a task), (2) participants in the pride condition who failed to answer both attention check questions, (3) participants who reported technical issues which may affect their responses, (4) participants who correctly guessed the true purpose of the study, and (5) participants who asked for their data to be removed. Based on these five exclusion criteria, I removed three participants for failing to correctly answer both control check questions. Note that eight other participants failed one control check question (four from the pride condition and four from the neutral condition), but I elected to keep them in the analysis as I did not want to reduce the already small sample size. Re-running the

analyses excluding the eight participants who failed one control check question did not alter the pattern or significance of the results. No participants reported experiencing technical issues, and none guessed the real purpose of the study. Finally, twelve participants who asked to withdraw their data were deleted. Therefore, the final sample consisted of 66 participants: 32 male and 33 female and one non-binary/third gender with an average age of 21.32 ($SD = 2.09$).

Manipulation Check for Pride

I created a variable that assessed the extent to which participants felt vicarious pride while reading the short story in task 1 (i.e., vicarious pride manipulation). This variable was based on the two items described in the procedure section ($r = .82, p < .001$). As expected, participants assigned to the vicarious pride condition reported that the scenario elicited more vicarious pride ($M = 4.57, SD = .28$) compared to participants in the neutral condition ($M = 3.08, SD = .26; F(1, 64) = 14.71, p < .001$).

Effect of Pride on Positivity

I then created a second variable that assessed the extent to which participants felt positive after reading the short story in task 1 based on the two items described in the procedure section ($r = .84, p < .001$). This was done as unlike generalized positive affect, vicarious pride is characterized by a shared emotional response, even in the absence of any direct personal contribution (De Hooze & Van Osch, 2021). It is fundamentally a social emotion, drawing individuals into a collective identity through the accomplishments of others. Although I expected the two short stories to elicit similar levels of positive emotions, this was not the case. In fact, mean positivity ratings were significantly higher in the vicarious pride condition ($M = 4.65, SD = .255$) compared to the neutral condition ($M = 3.97, SD = .233; F(1, 64) = 3.85, p = .054$). Given this unexpected effect, I conducted a series of Pearson correlations to determine whether positivity needed to be included as a covariate in any of the main analyses involving information search, engagement with promotional content, ticket purchase intention, and social media engagement. The results were as follows: (1) information search ($r = .19, p = .123$), (2) engagement with promotional content ($r = .16, p = .188$), (3) ticket purchase intention ($r = .39, p = .001$), (4) social media engagement ($r = .42, p < .001$). Taken together, this indicates that positivity does not need to be included in subsequent analysis.

Testing for Potential Covariates

Information search. To determine whether any covariates should be included in analyses involving information search, I first examined the relationships between information search and the four potential covariates: past attendance at a Concordia University sports event, current involvement in campus activities, being a university sports fan, and enjoyment of football. A series of Pearson correlation analyses were conducted to assess these relationships. Results indicated that the correlation between information search and past attendance was not statistically significant ($r = -.14, p = .264$). The correlation between information search and current involvement in campus activities was not statistically significant ($r = -.07, p = .584$). The correlation between information search and how much participants enjoy football was not statistically significant ($r = .09, p = .464$). Finally, the correlation between information search and being a university sports fan was significant ($r = .36, p = .003$), and the strength of the relationship was weak. Based on this set of analysis, no variables demonstrated a strong enough relationship with information search, therefore, no covariates were included in subsequent analyses involving information search.

Engagement with promotional content. I next conducted a second set of Pearson correlations using the following set of potential covariates (i.e., past attendance, being a university sports fan, and enjoyment of football) to determine whether they should be included in future analyses involving the likelihood to engage with promotional content. Note that participation in extracurricular activities was not included in this analysis as I determined that there is no link between it and the likelihood to engage with promotional content. The results were as follows. The correlation between the likelihood to engage with promotional content and past attendance was not significant ($r = -.15, p = .241$). The correlation between the likelihood to engage with promotional content and participants enjoyment of football was moderately significant ($r = .29, p = .016$), there was a weak relationship. The correlation between the likelihood to engage with promotional content and being a university sports fan was moderately significant ($r = .26, p = .033$), there was a weak relationship. Based on this set of analysis, no variables demonstrated a strong enough relationship with the likelihood to engage with promotional content, therefore, no covariates were included in subsequent analyses involving the likelihood to engage with promotional content.

Ticket purchase intention. A third set of correlation analyses were conducted, this time to determine whether any covariates should be included in my analysis involving ticket purchase intention. The correlation between the likelihood to purchase tickets and past

attendance was moderately significant ($r = -.27, p = .029$), there was a weak relationship. The correlation between the likelihood to purchase tickets and current involvement in campus activities was moderately significant ($r = -.24, p = .048$), there was no relationship. The correlation between the likelihood to purchase tickets and football enjoyment was not significant ($r = .24, p = .050$). Finally, the correlation between the likelihood to purchase tickets and being a university sports fan was significant ($r = .39, p = .001$), there was a weak relationship. Based on this set of analyses, no variable demonstrated a strong enough relationship with ticket purchase intention, therefore, no covariates were included in subsequent analyses involving ticket purchase intention.

Social media engagement. I ran a final set of correlational analyses, this time to determine whether any covariates should be included in my analyses involving social media engagement. Social media engagement was created using the mean of the three items; based on the post you just saw, how likely are you to (1) like the post, (2) comment on the post, and (3) share the post (Cronbach's $\alpha = .783$). The correlation between social media engagement and past attendance was moderately significant ($r = -.26, p = .036$), there was a weak relationship. The correlation between social media engagement and current participation in campus activities was moderately significant ($r = -.31, p = .011$), there was a weak relationship. The correlation between social media engagement and football enjoyment was not significant ($r = .21, p = .088$). Finally, the correlation between social media engagement and being a university sports fan was significant ($r = .48, p < .001$), there was a weak relationship. Based on this set of analyses, no variable demonstrated a strong enough relationship with social media engagement, therefore, no covariates were included in subsequent analyses involving social media engagement.

Effect of Pride on Information Search, Engagement with Promotional Content, Ticket Purchase Intention and Social Media Engagement

To examine differences in participants' behavioural intentions related to information search, engagement with promotional content, ticket purchase intention, and social media engagement as a function of pride, a MANOVA was conducted. The vicarious pride condition (0 = neutral and 1 = vicarious pride) was entered as the independent variable, and each of the four behavioural intention items (all continuous) were entered as dependent variables. To anticipate, there were no significant effects of pride on any of the measures, and thus, the results did not support my second hypothesis. The results are presented below.

The results of the MANOVA indicated that pride did not have a statistically significant effect on any of the measured behavioural intentions. Specifically, there was no significant difference in information search intentions between the vicarious pride condition ($M = 3.07, SD = 1.741$) and the neutral condition ($M = 2.61, SD = 1.777; F(1, 64) = 1.10, p = .299$). Similarly, vicarious pride had no significant impact on participants' likelihood to engage with promotional content ($F(1, 64) = .88, p = .352$), indicating that there was no difference between the vicarious pride condition ($M = 3.47, SD = 1.737$) and neutral condition ($M = 3.06, SD = 1.804$). The results also revealed that vicarious pride did not have a significant effect on ticket purchase intention ($F(1, 64) = .34, p = .559$), indicating that there was no statistical difference between participants in the vicarious pride condition ($M = 2.43, SD = 1.524$) and neutral condition ($M = 2.22, SD = 1.396$). Finally, vicarious pride did not have a significant effect on social media engagement ($F(1, 64) = .002, p = .965$), indicating that there was no statistical difference between participants in the vicarious pride condition ($M = 2.48, SD = 1.346$) and neutral condition ($M = 2.46, SD = 1.351$).

Effect of Pride on Team Identification

An ANOVA was then conducted to analyse differences in team identification as a function of vicarious pride. The conditions (0 = neutral and 1 = vicarious pride) that participants were exposed to was entered as the fixed factor, and team identification was entered as the dependent variable. The results revealed no significant effect of vicarious pride on team identification ($F(1, 64) = .71, p = .403$), indicating that there was no statistically significant difference in identification between participants in the neutral condition ($M = 2.16, SD = .24$) relative to those in the vicarious pride condition ($M = 2.30, SD = .26$). This result does not support hypothesis 3.

Effects of Identification on Behavioural Intentions

A series of linear regressions were conducted to analyse each behavioural intention measure as a function of team identification. The mean identification score was entered as the fixed factor, and each behavioural intention item (information search, engagement in promotional content, ticket purchase intention, and social media engagement) were entered as dependent variables. Firstly, the results revealed that team identification had a significant and positive relationship with information search ($b = .664, t = 5.111, p < .001$). Secondly, results revealed that team identification had a significant and positive relationship with the likelihood to engage in promotional content ($b = .544, t = 3.902, p < .001$). Thirdly, results

revealed that team identification had a significant and positive relationship with ticket purchase intentions ($b = .725, t = 8.183, p < .001$). Finally, results revealed that team identification had a significant and positive relationship with social media engagement ($b = .670, t = 8.091, p < .001$). In summary, the results revealed a positive and significant relationship between team identification and all behavioural intention measures.

Testing for Mediation (Team Identification)

Given that vicarious pride did not significantly influence team identification, I no longer expected that team identification would mediate the relationship between vicarious pride and any of the four behavioural intentions. Despite this, I conducted mediation analyses using each behavioural intention item as dependent variables. To anticipate, and as expected, there was no evidence of an indirect effect of vicarious pride, through team identification, on any of the behavioural intention items, therefore H4 was not supported.

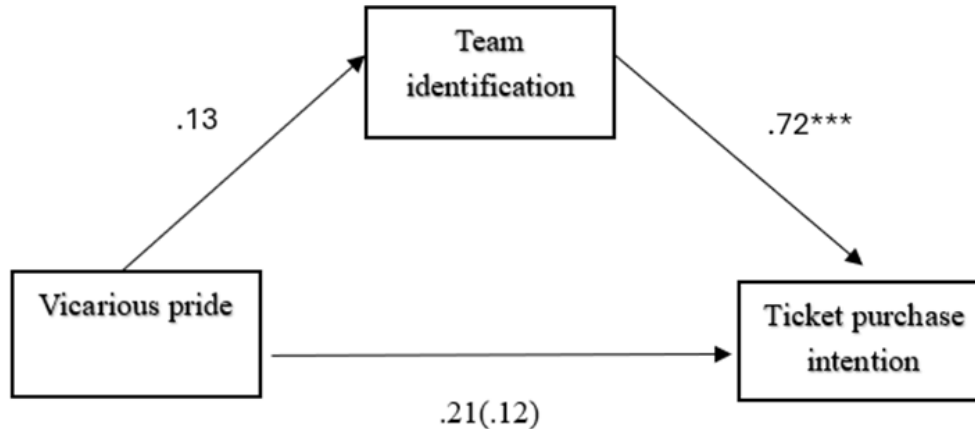
Below, I report the results of the mediational analyses using ticket purchase intention. I chose to illustrate this dependent variable as it is a metric of strong interest for managers. A summary of the results for the other three dependent measures can be found in table 1 (and the complete statistics can be found in appendix E).

To test whether team identification is a mediator between the vicarious pride manipulation and ticket purchase intentions, an analysis was conducted with PROCESS using Model 4 proposed by Hayes (2022). The condition that participants were assigned to (0 = neutral and 1 = vicarious pride) was entered as the independent variable, team identification (continuous) was entered as a mediator, and ticket purchase intention was entered as the dependent variable. The results of this analysis indicate that being in the vicarious pride condition did not significantly impact team identification ($b = .13, t(64) = .37, p = .711$), even though team identification had a significant effect on purchase intention ($b = .72, t(63) = 8.10, p < .001$). The results also show that vicarious pride did not significantly impact ticket purchase intentions ($b = .21, t(64) = .59, p = .560$), and when team identification was accounted for, this relationship remained non-significant ($b = .12, t(63) = .45, p = .652$). Further, there was no evidence of an indirect effect of vicarious pride on ticket purchase intention through team identification (point estimate: .0958, 95% $CI = -.3904$ to .6205). Refer to figure 2 for an illustration of the mediation effect of team identification on ticket purchase intention.

Table 1**Identification as a Mediator (Study 2)**

	95% CI: Identification (Indirect Effect)	a	b	c	c'
Information search	[-.3645, .5893]	.13	.66*	.46	.37
Engagement in promotional content	[-.2740, .5132]	.13	.54*	.41	.34
Social media engagement	[-.3824, .5973]	.13	.67*	.01	-.07

Notes: (a) independent variable → mediator, (b) mediator → dependent variable, (c) independent variable → dependent variable, (c') independent variable → dependent variable when mediator is included in model. * $p < .001$

Figure 2**Mediation Effect of Team Identification (Ticket Purchase Intention)**

Notes: Direct effects represent the standardized regression coefficient. The value inside the parenthesis represents the standardized regression coefficient when the proposed mediator, team identification, is included in the model.

*** $p < .001$

Discussion

Overall, study 2 results do not support H2, H3 or H4. Specifically, there was no significant relationship between vicarious pride and all four of the behavioural intention measures (information search, engagement with promotional content, ticket purchase intention and social media engagement), hypothesis 2 was not supported. Furthermore, there

was no significant effect of vicarious pride on team identification, hypothesis 3 was not supported. Finally, despite revealing a positive significant effect between team identification and all behavioural intention measures, results revealed that team identification did not significantly mediate the relationship between vicarious pride and behavioural intentions, hypothesis 4 was not supported.

General Discussion

Summary of Results

This research aimed to explore students' behavioural intentions in relation to university sport events in Canada. Specifically, study 1 found no significant relationship between depletion and behavioural intentions (information search, word of mouth communication and ticket purchase intention), H1 was not supported. Study 2 found no significant effect of vicarious pride on behavioural intentions (information search, engagement with promotional content, ticket purchase intention and social media engagement), H2 was not supported. Furthermore, there was no significant effect of team identification on behavioural intention, H3 was not supported. Finally, despite a significant and positive relationship between vicarious pride and team identification, team identification did not mediate the relationship between vicarious pride and behavioural intentions, H4 was not supported.

Theoretical Contributions

Issues like limited scholarship opportunities, smaller athletic budgets, and fewer televised games (Danylchuk & MacLean, 2001) create a landscape where student attendance for Canadian university sport events cannot be understood through the same lens as larger markets. While behavioural intentions have been studied extensively in sport settings, they have not yet been explored, to the best of my knowledge, through the lens of Canadian university sport. I contribute to the sport literature by examining several behavioural intention measures across two studies to capture a better picture of engagement in the under-researched context of Canadian university sport in two ways. First, by examining the role of ego depletion on behavioural intentions (information search, word-of-mouth communication, ticket purchase intention, engagement in promotional content, and social media engagement), the first study shows that in contexts where baseline consumer engagement is already low,

depletion may not further diminish intentions. This finding highlights the importance of considering existing engagement levels as a boundary condition when applying psychological depletion theories to sport consumption behaviours.

In study 2, although the vicarious pride manipulation was successful, and team identification had a significant effect on all behavioural intentions, team identification did not mediate the relationship between vicarious pride and behavioural intentions. This suggests that vicarious pride, being inherently social in nature, may require a more robust sense of “we-ness” or shared community identity to be effective. As such, the findings point to a potential boundary condition for the effectiveness of pride-based strategies in low-attendance sport environments and underscores the importance of considering baseline engagement levels when examining the impact of brand pride.

Managerial implications

From a managerial perspective, the findings suggest that cognitive states such as ego depletion and vicarious pride may have limited influence on consumer engagement in contexts where baseline interest is low, such as Concordia Stingers football games. In these settings, managers may benefit from emphasizing more tangible, experiential elements. Aspects like the servicescape, game-day atmosphere, pre- and post-game entertainment, halftime shows, free food, and affordable ticket pricing are likely perceived as value-added and may have a stronger impact on consumer behaviour. Notably, Study 2 confirmed a positive and significant relationship between team identification and behavioural intentions, consistent with findings from larger markets. This highlights the importance of fostering a strong sense of team identity as a key driver of engagement for sport managers.

Limitations and Future Research

This study was the first attempt at examining vicarious pride, team identification, ego depletion and behavioural intentions of Canadian university sports on a student population. While the theoretical foundation of this study remains sound, the conditions under which the research was conducted were not ideal, which may have impacted the findings. As such, several limitations are acknowledged, and avenues for future research are proposed.

First, vicarious pride was elicited using a written scenario. This method has been shown to be effective in previous research and was intended to control for potential biases or confounding variables that may occur from vicarious pride elicited at live events. However,

the inherent lack of realism in this approach may have affected participants' responses. It is possible that students would react differently if experiencing a major achievement, such as a win or a big play, at a live sporting event. Future research should consider sampling participants in real-time at live events to better capture authentic experiences of vicarious pride.

Second, a small non-diverse sample size was used with only 71 participants data analysed in study 1 and 66 in study 2, all of whom were recruited from two first-year classes at a single campus of Concordia University. This limited scope may not accurately reflect the broader Canadian university student population. Furthermore, first-year students may not yet have developed a strong sense of pride or identity with their school or its sports teams. This could have led to the low baseline interest, which may have made it difficult to detect significant effects, particularly those related to vicarious pride. Additionally, Canadian university sports span a wide range of contexts, with differing levels of student engagement across schools. Smaller university towns often have higher levels of school pride and student identification, as games are seen as central social events where students gather in large numbers to socialize and celebrate. In contrast, larger urban schools tend to compete with many other entertainment options, traditionally seeing lower attendance and engagement. By studying a low-engagement school like Concordia, this study may not have accurately captured the university student population in Canada. Future research should include students from multiple classes and academic years at both small-town and large-city universities across Canada to better reflect the diversity of Canadian university sport engagement.

Lastly, this research suggests that in low-engagement environments within niche sport markets, vicarious pride may not be the most relevant dimension of brand pride. As a socially driven construct, vicarious pride relies on a strong sense of "we-ness" within a community, something that may be lacking in low-engagement environments. Instead, introspective brand pride, being individualistic in nature, may be better suited for Canadian university sports as it allows individuals to enhance their self-identity through the achievements of external entities (Nandy & Sondhi, 2022) without requiring the social aspect.

Conclusion

Generally underexplored, this thesis is the first attempt at examining ego depletion, vicarious pride and team identification in niche sports markets. Specifically, I examine student attendance in Canadian university sports and examine how these psychological

factors affect attendance. The findings revealed that there was no significant impact of ego depletion or vicarious pride on students' behavioural intentions. Furthermore, there was a significant positive effect of team identification on behavioural intentions, however, team identification does not mediate the relationship between vicarious pride and behavioural intentions. These findings suggest that niche sport markets need to be examined independently from major leagues, and suggests that future research should examine individualistic dimensions of brand pride along with tangible factors affecting behavioural intentions in niche sport markets

References

- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252–1265.
- Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: how interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, 74(6), 1773–1801.
- Baumeister, R. F., Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7(1), 1–15.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego, CA: Academic Press.
- Biscaia, R., Correia, A., Yoshida, M., Rosado, A., & Marôco, J. (2013). The role of service quality and ticket price on satisfaction and behavioral intentions within the professional soccer context. *International Journal of Sports Marketing and Sponsorship*, 14(4), 301–325. <https://doi.org/10.1108/IJSMS-14-04-2013-B004>
- Bruyneel, S. D., Dewitte, S., Franses, P. H., & Dekimpe, M. G. (2009). I felt low and my purse feels light: Depleting mood regulation attempts affect risk decision making. *Journal of Behavioral Decision Making*, 22, 153–170. <https://doi.org/10.1002/bdm.619>
- Carter, E. C., & McCullough, M. E. (2014). Publication bias and the limited strength model of self-control: Has the evidence for ego depletion been overestimated? *Frontiers in Psychology*, 5, 823.
- Chahardovali, T., Watanabe, N. M., & Dastrup, R. W. (2024). Does location matter? An econometric analysis of stadium location and attendance at National Women's Soccer League matches. *Sociology of Sport Journal*, 41(1), 39–50. <https://doi.org/10.1123/ssj.2022-0217>
- Cho, H., Lee, H.-W., & Pyun, D. Y. (2019). The influence of stadium environment on attendance intentions in spectator sport. *International Journal of Sports Marketing and Sponsorship*, 20(2), 276–290. <https://doi.org/10.1108/IJSMS-04-2017-0025>

- Coates, D., Humphreys, B. R., & Zhou, L. (2014). Reference-dependent preferences, loss aversion, and live game attendance. *Economic Inquiry*, 52(3), 959–973.
- Conner, M., Sheeran, P., Norman, P., & Armitage, C. J. (2000). Temporal stability as a moderator of relationships in the theory of planned behavior. *British Journal of Social Psychology*, 31, 469–493. <https://doi.org/10.1348/014466600164598>
- Correia, A., & Esteves, S. (2007). An exploratory study of spectators' motivation in football. *International Journal of Sport Management and Marketing*, 2(5-6), 572–590.
- Danylchuk, K. E., & MacLean, J. (2001). Intercollegiate athletics in Canadian universities: Perspectives on the future. *Journal of sport management*, 15(4), 364-379.
- De Hooge, I. E., & Van Osch, Y. (2021). I feel different, but in every case I feel proud: Distinguishing self-pride, group-pride, and vicarious-pride. *Frontiers in Psychology*, 12, 735383.
- Decrop, A., & Derbaix, C. (2010). Pride in contemporary sport consumption: A marketing perspective. *Journal of the Academy of Marketing Science*, 38, 586–603.
- Dickens, L. R., & Robins, R. W. (2022). Pride: A meta-analytic project. *Emotion*, 22(5), 1071..
- Foroughi, B., Nikbin, D., Hyun, S. S., & Iranmanesh, M. (2016). Impact of core product quality on sport fans' emotions and behavioral intentions. *International Journal of Sports Marketing and Sponsorship*, 17(2), 110–129.
- Foroughi, B., Mohammad Shah, K. A., Ramayah, T., & Iranmanesh, M. (2019). The effects of peripheral service quality on spectators' emotions and behavioural intentions. *International Journal of Sports Marketing and Sponsorship*, 20(3), 495–515.
- Gordon, B. S., Yoshida, M., Nakazawa, M., & Bass, J. (2021). The role of pride feelings in the team and fan community identification processes: An empirical examination in professional sport. *Corporate Reputation Review*, 24, 76–94.
- Greiger, N. M. (2013). Intercollegiate Athletics in Canada and the United States: Differences in Access, Quality , and Funding. *The College Quarterly*. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1017978.pdf>

- Gregersen, J., Hatzigeorgiadis, A., Galanis, E., Comoutos, N., & Papaioannou, A. (2017). Countering the consequences of ego depletion: The effects of self-talk on selective attention. *Journal of Sport and Exercise Psychology*, 39(3), 161-171.
- Hall, J., O'Mahony, B., & Vieceli, J. (2010). An empirical model of attendance factors at major sporting events. *International Journal of Hospitality Management*, 29(2), 328–334. <https://doi.org/10.1016/j.ijhm.2009.10.011>
- Han, S., Lerner, J. S., & Keltner, D. (2007). Feelings and consumer decision making: The appraisal-tendency framework. *Journal of Consumer Psychology*, 17(3), 158–168.
- Haynes, A., Kemps, E., & Moffitt, R. (2016). Too depleted to try? Testing the process model of ego depletion in the context of unhealthy snack consumption. *Applied Psychology: Health and Well-Being*, 8(3), 386-404.
- Helm, S. V., Renk, U., & Mishra, A. (2016). Exploring the impact of employees' self-concept, brand identification and brand pride on brand citizenship behaviors. *European Journal of Marketing*, 50(1/2), 58–77. <https://doi.org/10.1108/ejm-03-2014-0162>
- Heere, B., & James, J. D. (2007). Stepping outside the lines: Developing a multi-dimensional team identity scale based on social identity theory. *Sport Management Review*, 10(1), 65–92.
- Hill, B., & Green, B. C. (2000). Repeat attendance as a function of involvement, loyalty, and the sportscape across three football contexts. *Sport Management Review*, 3(2), 145–162.
- Humphreys, B. R., & Johnson, C. (2020). The effect of superstars on game attendance: Evidence from the NBA. *Journal of Sports Economics*. <https://doi.org/10.1177/1527002519885441>
- Hyun, M., Jones, G. J., Jee, W., Jordan, J. S., Du, J., & Lee, Y. (2023). Revisiting the uncertainty of outcome hypothesis and the loss aversion hypothesis in the National Basketball Association: Adding a predicted game quality perspective. *Journal of Sports Economics*, 24(8), 1076–1096. <https://doi.org/10.1177/15270025231197427>

- Inzlicht, M., & Schmeichel, B. J. (2012). What is ego depletion? Toward a mechanistic revision of the resource model of self-control. *Perspectives on Psychological Science*. <https://doi.org/10.1177/1745691612454134>
- Inzlicht, M., Schmeichel, B. J., & Macrae, C. N. (2014). Why self-control seems (but may not be) limited. *Trends in Cognitive Sciences*, 18(3), 127–133.
- James, J. D., & Trail, G. T. (2008). The relationship between team identification and sport consumption intentions. *International Journal of Sport Management*, 9(4), 427–440.
- Karg, A., Nguyen, J., & McDonald, H. (2021). Understanding Season Ticket Holder Attendance Decisions. *Journal of Sport Management*, 35(3), 239–253. <https://doi.org/10.1123/jsm.2020-0284>
- Kaur, H., & Verma, H. V. (2023). The emotion of pride in consumer behaviour and marketing: A review, classification and future research agenda. *Management Research Review*, 46(4), 579–604.
- Kidd, B. (1996). *The struggle for Canadian sport*. University of Toronto Press. <http://hdl.handle.net/2027/heb.06789>
- Kim, M. J., & Mao, L. L. (2021). Sport consumers motivation for live attendance and mediated sports consumption: A qualitative analysis. *Sport in Society*, 24(4), 515–533.
- Kim, S.-H., & Huang, R. (2021). Understanding local food consumption from an ideological perspective: Locavorism, authenticity, pride, and willingness to visit. *Journal of Retailing and Consumer Services*, 58, 102330. <https://doi.org/10.1016/j.jretconser.2020.102330>
- Kuppelwieser, V. G., Grefrath, R., & Dziuk, A. (2011). A classification of brand pride using trust and commitment. *International Journal of Business and Social Science*, 2(3), 36–45.
- Lee, C., & Bang, H. (2011). Comparison of Division I and Division III intercollegiate spectators: Motives and constraints. *International Journal of Leisure and Tourism Marketing*, 2(2), 159–175. <https://doi.org/10.1504/IJLTM.2011.038887>

- Lee, S., & Kim, D.-Y. (2021). Brand tourism effect in the luxury hotel industry. *Journal of Product & Brand Management*, 30(1), 90–103. <https://doi.org/10.1108/JPBM-09-2019-2574>
- Lewis, M., Sullivan, M. W., Stanger, C., & Weiss, M. (1989). Self development and self-conscious emotions. *Child Development*, 146–156.
- Madrigal, R. (1995). Cognitive and affective determinants of fan satisfaction with sporting event attendance. *Journal of Leisure Research*, 27, 205–227.
- Mahony, D. F., Nakazawa, M., Funk, D. C., James, J. D., & Gladden, J. M. (2002). Motivational factors influencing the behaviour of J. League spectators. *Sport Management Review*, 5(1), 1–24.
- Maranges, H. M., Schmeichel, B. J., & Baumeister, R. F. (2017). Comparing cognitive load and self-regulatory depletion: Effects on emotions and cognitions. *Learning and Instruction*, 51, 74–84.
- Mayer, K. C., Morse, A. L., Eddy, T. W., & Love, A. (2017). Constraint factors affecting nonattendance in collegiate volleyball. *International Journal of Sport Management and Marketing*, 17(3), 182–197. <https://doi.org/10.1504/IJSMM.2017.10006501>
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126, 247–259.
- Nandy, S., & Sondhi, N. (2022). Brand pride in consumer–brand relationships: Towards a conceptual framework. *Global Business Review*, 23(5), 1098–1117.
- Nandy, S., Sondhi, N., & Joshi, H. (2023). Antecedents and outcomes of brand pride: Moderating role of narcissism. *Spanish Journal of Marketing - ESIC*, 27(1), 98–116. <https://doi.org/10.1108/sjme-04-2022-0083>
- Rocha, C. M., & Fink, J. S. (2015). Patriotism, national athletes and intention to purchase international sports products. *International Journal of Sports Marketing and Sponsorship*, 16(2), 57-71.
- Schreyer, D., & Ansari, P. (2022). Stadium attendance demand research: A scoping review. *Journal of Sports Economics*. <https://doi.org/10.1177/15270025211000404>

- Septianto, F., Seo, Y., Sung, B., & Zhao, F. (2020). Authenticity and exclusivity appeals in luxury advertising: The role of promotion and prevention pride. *European Journal of Marketing*, 54(6), 1305–1323. <https://doi.org/10.1108/EJM-10-2018-0690>
- Septianto, F., Sung, B., Seo, Y., & Tugiman, N. (2018). Proud volunteers: The role of self- and vicarious-pride in promoting volunteering. *Marketing Letters*, 29, 501–519.
- Silveira, M. P., Cardoso, M. V., & Quevedo-Silva, F. (2019). Factors influencing attendance at stadiums and arenas. *Marketing Intelligence & Planning*, 37(1), 50–65.
- Simmons, J., Popp, N., & Greenwell, T. C. (2021). Declining student attendance at college sporting events: Testing the relative influence of constraints. *Sport Marketing Quarterly*, 30(2), 122–134.
- Simmons, J. M., Popp, N. K., McEvoy, C. D., & Howell, S. M. (2018). Using fan passion to investigate constraints to student attendance at college football games. *Journal of Intercollegiate Sport*, 11(2), 193–213.
- Soscia, I. 2007. Gratitude, delight, or guilt: The role of consumers' emotions in predicting post consumption behaviors. *Psychology & Marketing*, 24 (10): 871–894.
- Soyguden, A., Schneider, R. C., Barut, Y., & Imamoglu, O. (2019). Factors affecting stadium attendance of professional football club supporters. *Baltic Journal of Sport and Health Sciences*, 3(114).
- Swanson, S. R., Gwinner, K., Larson, B. V., & Janda, S. (2003). Motivations of college student game attendance and word-of-mouth behavior: The impact of gender differences. *Sport Marketing Quarterly*, 12(3).
- Taijfel, H., & Turner, J. C. (1986). Social identity theory of intergroup behavior. In W. Austin & S. Worchel (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 33–47). Chicago: Nelson-Hall.
- Taute, H. A., Sierra, J. J., Carter, L. L., & Maher, A. A. (2017). A sequential process of brand tribalism, brand pride and brand attitude to explain purchase intention: A cross-continent replication study. *Journal of Product and Brand Management*, 26(3), 239–250. <https://doi.org/10.1108/JPBM-08-2016-1289>

- Trail, G. T., Fink, J. S., & Anderson, D. F. (2000). Sport spectator consumption behavior. *Sport Marketing Quarterly*, 12(1), 8–17.
- Tracy, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, 15(2), 103–125.
- Tracy, J. L., & Robins, R. W. (2007). The nature of pride. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 263–282). New York: Guilford Press.
- Tracy, J. L., Shariff, A. F., & Cheng, J. T. (2010). A naturalist's view of pride. *Emotion Review*, 2(2), 163–177. <https://doi.org/10.1177/1754073909354627>
- Tuškej, U., Golob, U., & Podnar, K. (2013). The role of consumer–brand identification in building brand relationships. *Journal of Business Research*, 66(1), 53–59.
- Usport. (2024). U SPORTS sets broadcast records in 2023-24. *The Sport information Resource centre*. Retrieved from <https://sirc.ca/news/u-sports-sets-broadcast-records-in-2023-24/>
- Wakefield, K. L. (2016). Using fan passion to predict attendance, media consumption, and social media behaviors. *Journal of Sport Management*, 30(3), 229–247.
- Wakefield, K. L., & Sloan, H. J. (1995). The effects of team loyalty and selected stadium factors on spectator attendance. *Journal of Sport Management*, 9(2), 153–172.
- Wakefield, K. L. (1995). The pervasive effects of social influence on sporting event attendance. *Journal of Sport and Social Issues*, 19, 335–351.
- Walsh, D. (2014). Attenuating depletion using goal priming. *Journal of Consumer Psychology*, 24(4), 497–505. <https://doi.org/10.1016/j.jcps.2014.05.001>
- Wang, C., & Matsuoka, H. (2014). Motives of sport spectators in China: A case study of the Chinese Super League. *International Journal of Sport Management and Marketing*, 15(1/2), 57–74. <https://doi.org/10.1504/IJSM.2014.069101>

- Wann, D. L. (2006). The causes and consequences of sport team identification. In A. A. Raney & J. Bryant (Eds.), *Handbook of sports and media* (pp. 331–352). Hillsdale, NJ: Erlbaum.
- Wann, D. L., & Branscombe, N. R. (1991). The positive social and self-concept consequences of sports team identification. *Journal of Sport and Social Issues*, 15(2), 115–127.
- Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with the team. *International Journal of Sport Psychology*, 24, 1–17.

Appendix A

Depletion Manipulation (Study 1)

Cognitive Depletion Condition

Task 1: Typing Ability

In the following task, you will be asked to retype a short passage.

As you are re-typing the passage, it is important that you do not use the spacebar or the letter 'e'. For example, if a sentence reads: "everyday, I eat the same meal", it should be retyped as: "vryday,Iatthsammal".

Please remember that the point of the task is to assess typing ability, not to see if you can retype the entire passage in the time provided. However, it is also important that you work on this as fast as you can.

You will work on this typing task for two minutes. After 2 minutes, the page will automatically advance to the next task.

Once you are ready to start, click the button at the bottom right.

Please retype the passage in the box below it and **do not use the spacebar or the letter 'e'.** (Remember, after 2 minutes, the page will automatically advance to the next task.

If you are like most people, you probably want to have a healthy-looking lawn. Besides being a great place to spend time, lawns do many things: they buffer temperatures, absorb water, and prevent soil from washing away. The best conditions for growing a lawn include even ground with a gentle slope and no low spots, a regular supply of water, a minimum of 6 hours of sunshine each day and moderate foot traffic. You will probably not have these ideal conditions at all times, so you should be realistic about your goals for your lawn. Lawns in Canada consist mostly of cool season turfgrass, which have their main growth periods in the spring and fall. Kentucky bluegrass needs more sun (especially in the morning) than many other grasses. Once your lawn is started, it is important to continue to maintain your lawn. That way, you'll be able to enjoy a healthy lawn for years to come.

Non-Depleted Condition

Task 1: Typing Ability

In the following task, you will be asked to retype a short passage.

As you are re-typing the passage, it is important that you type out the passage exactly as shown. For example, if a sentence reads: "everyday, I eat the same meal", it should be retyped as: "everyday, I eat the same meal". Please remember that the point of the task is to assess typing ability, not to see if you can retype the entire passage in the time provided. However, it is also important that you work on this as fast as you can.

You will work on this typing task for two minutes. After 2 minutes, the page will automatically advance to the next task.

Once you are ready to start, click the button at the bottom right.

Please retype the passage in the box below it **exactly as it is shown**. (Remember, after 2 minutes, the page will automatically advance to the next task.

If you are like most people, you probably want to have a healthy-looking lawn. Besides being a great place to spend time, lawns do many things: they buffer temperatures, absorb water, and prevent soil from washing away. The best conditions for growing a lawn include even ground with a gentle slope and no low spots, a regular supply of water, a minimum of 6 hours of sunshine each day and moderate foot traffic. You will probably not have these ideal conditions at all times, so you should be realistic about your goals for your lawn. Lawns in Canada consist mostly of cool season turfgrass, which have their main growth periods in the spring and fall. Kentucky bluegrass needs more sun (especially in the morning) than many other grasses. Once your lawn is started, it is important to continue to maintain your lawn. That way, you'll be able to enjoy a healthy lawn for years to come.

Manipulation Check Questions

1. How effortful did you find the typing task?
2. How mentally demanding did you find the typing task?
3. How much concentration did the typing task require?
4. How much did the typing task require you to resist your automatic typing tendencies?
5. How difficult did you find the typing task?

Appendix B

Vicarious Pride Manipulation (Study 2)

Vicarious Pride Condition

The Stingers, A Team To Be Proud

In 2023, the Concordia Stingers football team had a season to be proud of, with accomplishments that showcased their strength and determination.

Then came 2024. The season started rough—two tough losses to Sherbrooke and McGill. But the Stingers didn't back down. They fought back, delivering back-to-back victories over Laval and Montréal—two of the top teams in the league.

Then came the semifinal: a double-overtime battle, again against powerhouse Laval, that tested every ounce of grit they had. And they delivered something that hadn't happened in 20 years!

That victory wasn't just a win—it was a moment that reminded them of the journey they had taken and the legacy they were building, inspiring pride not only within the team but across the university and beyond.

Neutral Scenario

A Weekend With Friends

On a quiet weekday afternoon, a small group of friends met up after finishing their regular routines—classes, work, errands. They walked to a nearby café, found a table, and ordered drinks and snacks. The conversation covered everyday topics like school, recent events, and weekend plans.

They stayed for about an hour before deciding to head out. After a few casual goodbyes, they went their separate ways and continued with the rest of their day.

Nothing out of the ordinary happened—it was a simple, routine get-together.

Appendix C

Adapted Sport Spectator Identification Scale (SSIS)

1. How important to you is it that the Stingers football team win?
Not Important (1) 2 3 4 5 6 7 Very Important (8)
2. How strongly do you consider yourself a fan of the Stingers football team?
Not a fan at all (1) 2 3 4 5 6 7 Very much a fan (8)
3. How strongly do your friends see you as a fan of the Stingers football team?
Not a fan at all (1) 2 3 4 5 6 7 Very much a fan (8)
4. During the football season, how closely do you follow the Stingers?
Never (1) 2 3 4 5 6 7 Almost every day (8)
5. How important is being a fan of the Stingers football team to you?
Not Important (1) 2 3 4 5 6 7 Very Important (8)
6. How much do you dislike the Stingers' greatest rival?
Do not dislike (1) 2 3 4 5 6 7 Dislike very much (8)
7. How often do you display the Stingers name or insignia at school, on your clothing?
Never (1) 2 3 4 5 6 7 Always (8)

Appendix D

Instagram Post (Study 2)



Appendix E

Mediation Analysis (Team Identification)

Information Search

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
Y : Information Search
X : Pride
M : Team identification

Sample
Size: 66

OUTCOME VARIABLE:
Team identification

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0465	.0022	2.0689	.1389	1.0000	64.0000	.7106

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.0302	.5467	3.7137	.0004	.9381	3.1223
Pride	.1325	.3556	.3727	.7106	-.5778	.8429

OUTCOME VARIABLE:
Information Search

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5485	.3008	2.2398	13.5528	2.0000	63.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	.8199	.6271	1.3074	.1958	-.4333	2.0730
Pride	.3684	.3704	.9946	.3238	-.3718	1.1085
Team identification	.6579	.1301	5.0586	.0000	.3980	.9178

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

Information Search

Model Summary

R	R-sq	MSE	F	df1	df2	p
.1297	.0168	3.1003	1.0953	1.0000	64.0000	.2992

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.1556	.6692	3.2211	.0020	.8187	3.4924
Pride	.4556	.4353	1.0466	.2992	-.4140	1.3251

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.4556	.4353	1.0466	.2992	-.4140	1.3251

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.3684	.3704	.9946	.3238	-.3718	1.1085

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI	
Team identification	.0872	.2404	-.3645	.5893

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

----- END MATRIX -----

Engagement with Promotional Content

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4

Y : Engagement in promotional content

X : Pride

M : Team identification

Sample

Size: 66

OUTCOME VARIABLE:

Team identification

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0465	.0022	2.0689	.1389	1.0000	64.0000	.7106

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.0302	.5467	3.7137	.0004	.9381	3.1223
Pride	.1325	.3556	.3727	.7106	-.5778	.8429

OUTCOME VARIABLE:

Engagement in promotional content

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4488	.2014	2.5875	7.9442	2.0000	63.0000	.0008

Model

	coeff	se	t	p	LLCI	ULCI
Constant	1.5519	.6740	2.3026	.0246	.2050	2.8988
Pride	.3398	.3981	.8536	.3966	-.4557	1.1353
Team identification	.5381	.1398	3.8496	.0003	.2588	.8175

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

Engagement in promotional content

Model Summary

R	R-sq	MSE	F	df1	df2	p
---	------	-----	---	-----	-----	---

.1164 .0135 3.1462 .8791 1.0000 64.0000 .3520

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.6444	.6741	3.9228	.0002	1.2977	3.9912
Pride	.4111	.4385	.9376	.3520	-.4649	1.2871

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.4111	.4385	.9376	.3520	-.4649	1.2871

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.3398	.3981	.8536	.3966	-.4557	1.1353

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
Team identification	.0713	.1985	-.2740 .5132

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

----- END MATRIX -----

Ticket Purchase Intention

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4

Y : Ticket purchase intention

X : Pride

M : Team Identification

Sample

Size: 66

OUTCOME VARIABLE:

Team Identification

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0465	.0022	2.0689	.1389	1.0000	64.0000	.7106

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.0302	.5467	3.7137	.0004	.9381	3.1223
Pride	.1325	.3556	.3727	.7106	-.5778	.8429

OUTCOME VARIABLE:

Ticket purchase intention

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7162	.5129	1.0539	33.1721	2.0000	63.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	.5436	.4302	1.2636	.2110	-.3161	1.4032
Pride	.1153	.2541	.4538	.6515	-.3924	.6230
Team Identification	.7229	.0892	8.1026	.0000	.5446	.9012

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

Ticket purchase intention

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0731	.0053	2.1186	.3442	1.0000	64.0000	.5595

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.0111	.5532	3.6355	.0006	.9060	3.1162
Pride	.2111	.3598	.5867	.5595	-.5077	.9299

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.2111	.3598	.5867	.5595	-.5077	.9299

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1153	.2541	.4538	.6515	-.3924	.6230

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI	
Team Identification	.0958	.2566	-.3904	.6205

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

----- END MATRIX -----

Social Media Engagement

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
Y : Social media engagement
X : Pride
M : Team identification

Sample
Size: 66

OUTCOME VARIABLE:
MeanIden

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0465	.0022	2.0689	.1389	1.0000	64.0000	.7106

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.0302	.5467	3.7137	.0004	.9381	3.1223
Pride	.1325	.3556	.3727	.7106	-.5778	.8429

OUTCOME VARIABLE:
Social media engagement

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7116	.5064	.9227	32.3220	2.0000	63.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	1.0856	.4025	2.6973	.0090	.2813	1.8899
Pride	-.0741	.2377	-.3119	.7562	-.5492	.4009
Team identification	.6711	.0835	8.0399	.0000	.5043	.8379

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:
Social media engagement

Model Summary

R	R-sq	MSE	F	df1	df2	p
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.0055	.0000	1.8401	.0020	1.0000	64.0000	.9649
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Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.4481	.5156	4.7486	.0000	1.4182	3.4781
Pride	.0148	.3353	.0442	.9649	-.6551	.6847

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0148	.3353	.0442	.9649	-.6551	.6847

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0741	.2377	-.3119	.7562	-.5492	.4009

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
Team identification	.0890	.2461	-.3824	.5973

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000