

## **Disconnected delivery? Digital integrated marketing communications in sport and congruence with consumer perceptions and behavioral intentions**

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Digital integrated marketing communications (dIMC) is a powerful suite of tools and strategies to increase participation and sport consumption, particularly for not-for-profit sport organizations (NPSOs). Prior to COVID-19, dIMC had already become an important low-cost mechanism through which NPSOs could communicate with and engage members, participants, and stakeholders. However, it is unclear with the challenges NPSOs face (e.g., capacity, technological illiteracy) whether dIMC use meets the needs of organizations' consumer bases. This study investigated consumer perceptions of NPSO dIMC pre- and post-COVID-19 to determine congruence with the former, and effects on consumer attitudes and intentions. Findings suggest perceptions of dIMC, dIMC satisfaction, and resulting relationship quality can predict consumer intentions, with this becoming stronger post-COVID-19. It was identified that users are heterogeneous and variance across user groups in perceptions, relationships and behavioral intentions exist. This was evident in pre- and post-COVID-19 findings but also the changes that occurred during that period. Consequently, refining dIMC towards maximizing benefits provided through message specificity can provide a foundation for improving NPSOs technological literacy and implement best practices that meet consumer needs.

**Keywords:** *social media, not-for-profits, sport marketing, sport communication, Australia*

One trend that not-for-profit sport organizations (NPSOs) are facing on a global scale is the increasing need to develop and implement efficient and effective processes that are transparent, awareness building, participation increasing, and revenue generating (Bayle & Madella, 2002; Tower et al., 2006; Winand et al., 2016). In particular, sport organizations have experienced increased scrutiny regarding how resources are attracted, and how public funding is allocated (Winand et al., 2012). The impetus for this trend stems from the “new era” of sport organization operations characterized by resource scrutiny, heightened accountability, economic uncertainty, and rapid technological advancement (Parent et al., 2018). Exacerbating this trend has been the COVID-19 global health pandemic. COVID-19 struck sport organizations, contracting their labor force, limiting attendance and participation, and, overall, inhibiting core service delivery activities; it is imperative that sport organizations, particularly those with limited capacity and technological literacy, use all available tools to improve their activity delivery and achieve effective processes (Ding et al., 2021; Mastromartino et al., 2020; Thompson et al., 2024).

Concomitantly, digital integrated marketing communications (dIMC) have shown to offer a powerful suite of tools and strategies to connect socially, increase sport participation and consumption (Whitburn et al., 2020). That suite includes social media sites (Naraine & Parent, 2016) and digitized operations platforms (Thompson et al., 2024). Scholars have suggested that dIMC can improve

NPSO performance (e.g., Bayle & Madella, 2002; Winand et al., 2016), providing a digital connection point to the public and to external funding sources, as well as communicating and engaging with internal and external stakeholders. However, difficulties in measuring the effectiveness of dIMC (Achen, 2017; Hoeber et al., 2015; Whitburn et al., 2018), heterogeneity of audience (Whitburn et al., 2022), and the complexities of NPSO objectives (Winand et al., 2016) create evaluation issues, leading to ineffective and inefficient strategies implemented (or continued if already in place). Although NPSOs still value the capacity of dIMC to increase membership, generating revenue and community building (Naraine et al., 2024), many struggle to reconcile the full potential of dIMC and digital delivery to consumers to alleviate the constraints imposed by this new era of operation (Whitburn et al., 2020). Related, it is presently unknown how consumers and unique consumer segments feel about NPSO dIMC operations, specifically their attitudes and behavioral intentions, and how this is moderated across sports and demographic characteristics. This information, specifically when juxtaposed with realized organizational function outcomes, is critical to advance the current understanding of dIMC in this new era, as well as to provide guidance to NPSOs to develop efficient and effective practice.

Accordingly, the purpose of this study was to investigate the use of dIMC within NPSOs and the potential congruence with consumer perceptions and behavioral intentions both within group, across groups, and pre- and post-COVID-19. This study

builds upon Whitburn et al.'s (2020) existing work, as well as that of Achen (2017) and Winand et al. (2016) by uncovering the relationships that exist between functional benefits, experiential benefits, satisfaction, relationship quality, and behavioral intentions, predicting the influence these relationships have on sport consumption and identifying the impacts of the pandemic on these constructs. To achieve the study's purpose the authors deployed a survey tool to consumers of NPSOs and used statistical methods including structural equation modelling, and regression analyses to identify and quantify variances of perceptions, relationships and behavioral intentions across sports and user groups as specified by demographic characteristics. By doing so, this overcomes one of the core limitations of past NPSO work (e.g., Hoeber et al., 2015; Naraine & Parent, 2017) by illuminating the perception of organizational delivery and consumer demand from consumers themselves, not solely from the focal organization.

## Review of Literature

### Not-For-Profit Sport Organizations

NPSOs exist to provide opportunities for active participation, social engagement, and community cohesion (Parent et al., 2018; Tower et al., 2006). But, despite these noble intentions, these organizations have experienced increased marginalization at the expense of larger, profit driven sport organizations, restricting their potential to accrue funding (Hoeber et al., 2015; Winand et al., 2016). Consequently, NPSOs have often adopt-

ed innovative or creative mechanisms to generate increased capacity (Wicker et al., 2012), adopting professional or corporate tendencies (Robinson & France, 2011). Whether in the form of embracing more streamlined electronic processes (Hoeber & Hoeber, 2012) or creating informal cliques to knowledge share (Meiklejohn et al., 2016), NPSOs adapt to their environment as required to deliver on their *raison d'être*, their focal purpose. However, to achieve that purpose, NPSOs must use a combination of efficient and effective practice – where effectiveness is defined as the capacity of the organization to achieve its stated goals and efficiency measures the resources used for real production to combat resource constraints (Bayle & Madella, 2002; Winand et al., 2016). Thus, innovative, electronic processes can assist NPSOs mitigate a changing operational landscape that has produced heightened scrutiny, fewer financial sources, and increased competition (Parent et al., 2018).

Specifically, as this fluid operational environment ensues, sport organizations have deployed digital ways to engage members, providing value in the absence of core sport programming (Mastromartino et al., 2020). If adopted and implemented appropriately, digital activities could increase NPSO capacity and the ability to deliver on their *raison d'être*. However, poorly adopted and implemented digital activities can pose negative issues to organizations including inefficient use of resources, decrease in consumer engagement, and negative word of mouth (Kim, Ko, et al., 2011). In turn, the challenge NPSOs may be trying to solve – sustain-

ing membership during turbulent periods – may have an adverse effect if not implemented efficiently and effectively.

### **Digital Integrated Marketing Communications**

Digital activities are now commonplace in sport (Karg et al., 2022). The main driver of this digital implementation for sport organizations is the ability to engage with one's respective audience with an ongoing, instantaneous connection (Naraine & Parent, 2016, 2017). Conceptualized as dIMC by Whitburn et al. (2020), these digital activities involve various e-promotion activities such as major central hubs like websites and social media sites. Studies have shown the utility of dIMC like social media for the non-profit sport setting include enhanced awareness of the sport organization's offerings (Winand & Hoeber, 2017), increased membership and participation (Whitburn et al., 2018), and increased consumption and revenue raising (Achen, 2017).

Digital tools and strategies (i.e., dIMC), characterized by low cost, wide reach, and message timeliness, provide sporting organizations with numerous positive functional outcomes. The tools and outcomes focused on in this study are, arguably, the most widely used in sport: Facebook, Twitter/X, online forums (e.g., Reddit), and website content. In addition to raising awareness of sport participation opportunities, relationship marketing through dIMC provides organizations with the ability to maintain, retain and develop relationships with existing participants and members (Achen, 2017; Whitburn et al., 2020). There are several organiza-

tional benefits of this including supporting complex and consistent consumption practices of consumers, enhanced loyalty towards the organization, and minimization of the resource heavy exercise of finding new participants, thereby allowing resource allocation to the organizations' primary function of providing sport participation activities (Bayle & Madella, 2002; Whitburn et al., 2018).

Due to its emergent role within sport organizations, there are limitations around knowledge of dIMC use with practice outpacing theory, leading to inefficient use of the available tools (Whitburn et al., 2018, 2020). This has led to a one-size-fits-all approach and a lack of measurement and evaluation (Naraine & Parent, 2017). Thus, while dIMC is recognized as a mechanism embedded into NPSOs, it is critical to unpack whether there is congruence between the current operations and consumer perceptions, the outcome of which can elucidate whether realized dIMC is offering efficiency and effectiveness for sport organizations.

### **Segmentation**

In recent years, there has been a growing interest in segmenting social media users within a sport and consumer engagement context (e.g., Naraine, 2019). Sport fans encompass a diverse range of values, attitudes, and characteristics, indicating that they are not a homogenous group (Bayle et al., 2020). It is crucial for practitioners to recognize the impact of these differences on fans' perceptions and behaviors (Kim et al., 2019). By conducting an analysis of varying perceptions, attitudes, and intentions across demograph-

ic characteristics, valuable insights can be gained on how to effectively target and communicate with different consumer segments.

Market segmentation plays a pivotal role in this process by dividing a heterogeneous market into distinct segments based on shared characteristics. By identifying and selecting the most promising segment, sport organizations can align their efforts to achieve their objectives and goals. This approach enables organizations to tailor their products and communication strategies to specifically cater to the needs and desires of the targeted segments. Consequently, segmentation facilitates a better alignment between organizations' offerings and consumers' preferences (Funk et al., 2004; Mahony et al., 2000; Kim et al., 2019).

Moreover, segmentation provides an opportunity for under-resourced sport organizations to focus their limited resources and concentrate on communicating services and content to a specific market segment (Whitburn et al., 2020). This allows them to acquire the necessary resources while reducing marketing costs associated with the need to convey different messages or provide a wide range of services.

In the realm of digital marketing strategy, segmentation becomes even more critical. With the vast amount of content available to sport consumers, it is essential for organizations to cut through the clutter and effectively reach their intended audience (Naraine, 2019). By communicating positive attributes of their products in a language that resonates with the

consumers and on platforms they actively engage with, organizations can achieve the desired "cut through." Therefore, it becomes imperative for both academics and practitioners to investigate and understand potential attitudinal and behavioral differences among demographic groups, as these findings have significant implications for both theory and practice (Kim, Trail, et al., 2011; Whitburn et al., 2020).

## **Top of Form**

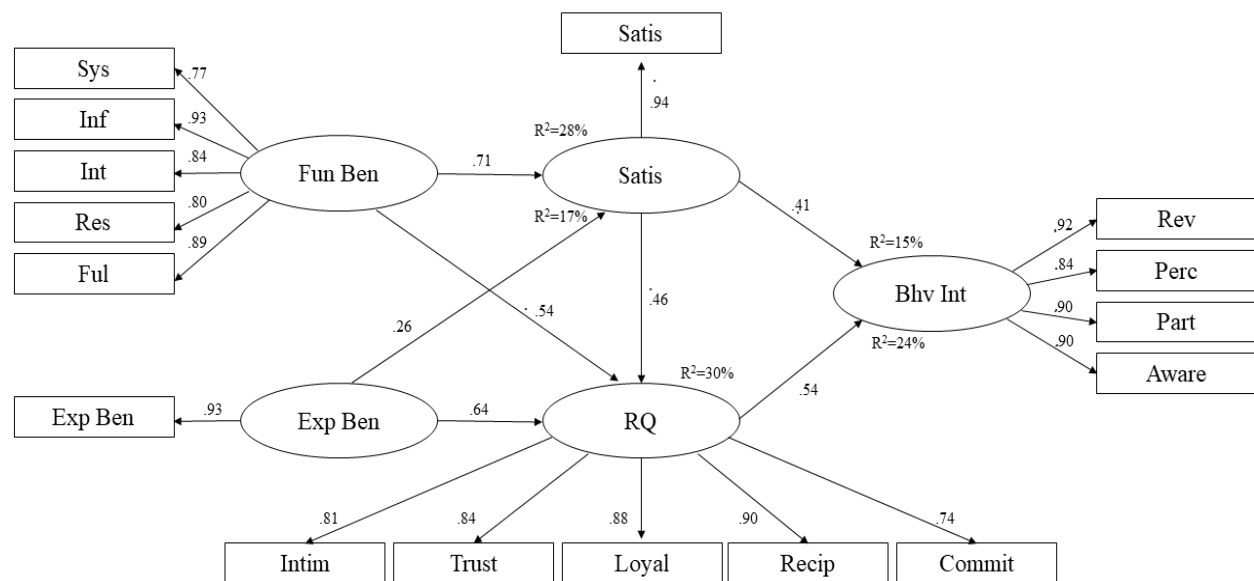
### **Conceptual Framework**

The present study extends the work of Whitburn et al. (2020) where dIMC in NPSOs was shown to have a direct effect on relationship quality and behavioral intentions, including revenue raising, increasing participation, raising awareness, and enhancing public perception. The model employed by Whitburn et al. (2020), presented in Figure 1, is utilized here as it represents the dIMC function as implemented by NPSOs. The model measures the dIMC function from consumer perceptions of messages and content (inputs), consumer attitudes including satisfaction and relationship quality (throughputs), and behavioral intentions (outputs). Functional benefits in this context refers to pragmatic and instrumental benefits of consumption offerings, and includes the sub dimensions information, interaction, design, systems and fulfilment (Whitburn et al., 2020). Experiential benefits relate to emotional benefits which satisfy hedonic needs for user enjoyment (Whitburn et al., 2020). Satisfaction (Kim, Trail, et al., 2011) focuses on the ability of product



**Figure 1.**

*Whitburn et al's (2020) model of dIMC with current study's measurements represented.*



Note.  $\chi^2 = 196.71$ ,  $df = 92$ ,  $\chi^2/df = 2.13$ ,  $RMSEA = 0.015$ ,  $CFI = 0.967$ ,  $NFI = 0.983$ ,  $TLI = 0.964$ .

quality and service environment quality to affect consumer satisfaction levels. Relationship quality is classified as a measure of the strength and depth of relationships between consumers and organizations (Whitburn et al., 2020) and includes reciprocity, trust, commitment and intimacy. Behavioral intentions are attitudes leading to future consumer actions which may be beneficial to an organization and includes perception, awareness, participation, and revenue.

This model displays high goodness of fit measurements supporting its use, and highlights dIMC in NPSOs has a direct positive effect on behavioral intentions through relationship quality, and through satisfaction. This shows dIMC has a significant relationship with positive organization outcomes including revenue raising,

increasing participation, awareness, and public perception. As such, providing evidence of the importance of dIMC assisting sport organizations achieve objectives (outputs) and justification of the need to explore dIMC strategies in this study.

In adapting past work, dimensions used to conceptualize constructs were refined in order to support identification of inter and intra-construct relationships. Generally, dIMC has been suggested to provide a number of positive functional benefits in a sport context through increasing communication, interaction and value co-creation with participants and members. Accordingly, the following research questions were advanced to guide the present study:

RQ1 – How can differences in messaging content across similar

organizations in a homogenized sport delivery system influence perceptions of quality of dIMC services of NPSOs, relationship quality, and behavioral intentions?

RQ2 – Is there evidence of variance in consumer perceptions across demographically segmented user groups to message content published digitally by NPSOs and how do these affect behavioral intentions?

## **Method**

### **Design and Instrumentation**

The research instrument employed in this study was an online survey distributed through social media and the e-mail databases of the participating NPSOs. Scale items were drawn from the established models presented in Whitburn et al. (2020) and were selected to measure consumer perceptions of organizational dIMC across the full function, beginning with perceptions of the quality of content delivered and extending through satisfaction, relationship quality, and behavioral intentions. Consistent with the integrated nature of dIMC, the survey considered communications delivered through social

media, NPSO websites, and e-mail as part of the combined dIMC function.

The survey included 62 items measuring five constructs: functional benefits, experiential benefits, satisfaction, relationship quality, and behavioral intentions. Functional benefits included information quality, fulfilment quality, design quality, system quality, and interaction quality. Relationship quality included reciprocity, trust, loyalty, intimacy, and commitment, while behavioral intentions included revenue, perception, participation, and awareness. Scale items were standardized, with slight wording changes to reflect the language used by individual sports.

Representative items included: “The information provided by my NPSO’s dIMC is useful” (Functional Benefits), “The social aspects provided are important to me” (Experiential Benefits), “Based on my experience with my NPSO, I feel very satisfied” (Satisfaction), “The organization is reliable” (Relationship Quality), and “I am willing to purchase the services/products of the organization” (Behavioral Intentions). Items were measured using a seven-point Likert scale in line with the existing scales. Measurement-model reliability and validity results for the retained indicators are presented in Table 1.

**Table 1.***Measurement Model Reliability and Validity*

| Construct                 | Variable | Mean | S. D | Loadings | Cronbach's Alpha | CR   | AVE  |
|---------------------------|----------|------|------|----------|------------------|------|------|
| Functional Benefit (FB)   |          | 4.98 | 1.74 |          |                  |      |      |
| Information Quality (Inf) |          | 5.11 | 1.38 |          | 0.82             | 0.85 | 0.88 |
|                           | Inf1     | 5.19 | 1.51 | 0.68     |                  |      |      |
|                           | Inf2     | 5.18 | 1.11 | 0.83     |                  |      |      |
|                           | Inf3     | 5.09 | 1.27 | 0.87     |                  |      |      |
|                           | Inf4     | 4.78 | 1.24 | 0.73     |                  |      |      |
| Fulfilment Quality (Ful)  |          | 4.90 | 1.65 |          | 0.86             | 0.83 | 0.91 |
|                           | Ful1     | 4.84 | 1.34 | 0.82     |                  |      |      |
|                           | Ful2     | 4.79 | 1.10 | 0.84     |                  |      |      |
|                           | Ful3     | 4.94 | 1.29 | 0.88     |                  |      |      |
| Design Quality (Des)      |          | 5.07 | 1.66 |          | 0.79             | 0.77 | 0.87 |
|                           | Des1     | 5.02 | 1.11 | 0.79     |                  |      |      |
|                           | Des2     | 5.19 | 1.08 | 0.86     |                  |      |      |
|                           | Des3     | 5.04 | 1.01 | 0.89     |                  |      |      |
| System Quality (Sys)      |          | 5.18 | 2.14 |          | 0.77             | 0.81 | 0.86 |
|                           | Sys1     | 5.37 | 1.08 | 0.89     |                  |      |      |
|                           | Sys2     | 4.88 | 1.24 | 0.82     |                  |      |      |
|                           | Sys3     | 5.12 | 1.52 | 0.64     |                  |      |      |
| Interaction Quality (Int) |          | 4.98 | 1.48 |          | 0.86             | 0.83 | 0.84 |
|                           | Int1     | 4.34 | 1.04 | 0.78     |                  |      |      |
|                           | Int2     | 5.27 | 1.09 | 0.94     |                  |      |      |
|                           | Int3     | 5.07 | 1.00 | 0.65     |                  |      |      |
| Experiential Benefit (EB) |          | 4.71 | 1.48 |          | 0.75             | 0.84 | 0.88 |
|                           | ExBen1   | 4.68 | 1.31 | 0.87     |                  |      |      |
|                           | ExBen2   | 5.04 | 1.04 | 0.81     |                  |      |      |
|                           | ExBen3   | 4.88 | 1.24 | 0.91     |                  |      |      |
|                           | ExBen4   | 4.87 | 1.67 | 0.92     |                  |      |      |
|                           | ExBen5   | 4.78 | 1.62 | 0.68     |                  |      |      |
| Satisfaction (SAT)        |          | 4.97 | 1.16 |          | 0.84             | 0.82 | 0.87 |
|                           | Satis1   | 4.84 | 0.92 | 0.78     |                  |      |      |
|                           | Satis2   | 4.94 | 1.24 | 0.65     |                  |      |      |
|                           | Satis3   | 5.09 | 1.04 | 0.82     |                  |      |      |



|                            |         |      |      |      |      |      |      |
|----------------------------|---------|------|------|------|------|------|------|
| Relationship Quality (RQ)  |         | 4.78 | 2.09 |      |      |      |      |
| Reciprocity (Recip)        |         | 4.11 | 1.54 |      | 0.74 | 0.77 | 0.84 |
|                            | Recip1  | 4.09 | 0.88 | 0.64 |      |      |      |
|                            | Recip2  | 4.07 | 1.18 | 0.87 |      |      |      |
|                            | Recip3  | 4.48 | 0.98 | 0.77 |      |      |      |
| Trust (Trust)              |         | 4.99 | 2.27 |      | 0.84 | 0.81 | 0.88 |
|                            | Trust1  | 5.31 | 1.04 | 0.67 |      |      |      |
|                            | Trust2  | 5.04 | 1.28 | 0.76 |      |      |      |
|                            | Trust3  | 4.91 | 1.24 | 0.92 |      |      |      |
|                            | Trust4  | 4.88 | 1.01 | 0.91 |      |      |      |
| Loyalty (Loyal)            |         | 4.92 | 1.16 |      | 0.81 | 0.83 | 0.87 |
|                            | Loy1    | 4.94 | 1.47 | 0.63 |      |      |      |
|                            | Loy2    | 4.93 | 1.09 | 0.78 |      |      |      |
|                            | Loy3    | 4.97 | 1.28 | 0.94 |      |      |      |
|                            | Loy4    | 4.84 | 1.21 | 0.64 |      |      |      |
| Intimacy (Intim)           |         | 4.78 | 2.17 |      | 0.88 | 0.83 | 0.89 |
|                            | Intim1  | 4.64 | 1.21 | 0.61 |      |      |      |
|                            | Intim2  | 5.18 | 1.44 | 0.76 |      |      |      |
|                            | Intim3  | 4.84 | 1.27 | 0.91 |      |      |      |
|                            | Intim4  | 4.38 | 1.14 | 0.91 |      |      |      |
|                            | Intim5  | 4.77 | 1.25 | 0.65 |      |      |      |
| Commitment (Commit)        |         | 4.80 | 1.36 |      | 0.92 | 0.93 | 0.94 |
|                            | Commit1 | 5.08 | 1.31 | 0.89 |      |      |      |
|                            | Commit2 | 5.17 | 1.56 | 0.93 |      |      |      |
|                            | Commit3 | 4.97 | 1.07 | 0.95 |      |      |      |
|                            | Commit4 | 4.85 | 1.31 | 0.94 |      |      |      |
| Behavioral Intentions (BI) |         | 4.98 | 1.42 |      |      |      |      |
| Revenue (Rev)              |         | 5.04 | 1.84 |      | 0.74 | 0.84 | 0.87 |
|                            | Rev1    | 5.08 | 1.01 | 0.92 |      |      |      |
|                            | Rev2    | 5.04 | 1.44 | 0.93 |      |      |      |
|                            | Rev3    | 4.89 | 1.17 | 0.90 |      |      |      |
| Perception (Perc)          |         | 4.91 | 1.70 |      | 0.77 | 0.83 | 0.89 |
|                            | Perc1   | 4.94 | 1.17 | 0.69 |      |      |      |
|                            | Perc2   | 5.08 | 1.12 | 0.76 |      |      |      |
|                            | Perc3   | 4.94 | 1.21 | 0.90 |      |      |      |
|                            | Perc4   | 5.08 | 1.61 | 0.91 |      |      |      |

|                      |       |      |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|------|
| Participation (Part) |       | 4.82 | 1.19 |      | 0.84 | 0.84 | 0.87 |
|                      | Part1 | 4.98 | 1.65 | 0.62 |      |      |      |
|                      | Part2 | 4.81 | 1.17 | 0.77 |      |      |      |
|                      | Part3 | 4.98 | 1.02 | 0.91 |      |      |      |
|                      | Part4 | 4.81 | 1.32 | 0.90 |      |      |      |
|                      | Part5 | 4.78 | 1.43 | 0.64 |      |      |      |
| Awareness (Aware)    |       | 4.77 | 2.10 |      | 0.74 | 0.80 | 0.82 |
|                      | Awar1 | 5.08 | 0.91 |      |      |      |      |
|                      | Awar2 | 4.74 | 1.41 |      |      |      |      |
|                      | Awar3 | 4.65 | 1.22 |      |      |      |      |

### Sample and Participants

Data were drawn from purposive samples of members and participants from three Australian NPSOs. Data were collected directly before COVID-19 in January 2020 and again in January 2024. Although the dates associated with COVID-19 vary and the pandemic has evolved into an endemic, these two time points provide a benchmark of consumer behavior and a follow-up comparison. Australian NPSOs were selected because of the nature of the Australian sport delivery model and its similarities with sport delivery systems worldwide (Karg et al., 2022; Tower et al., 2006). The participating NPSOs governed sport disciplines contested at the Olympic Games and Commonwealth Games. Each organization employed between five and eight full-time-equivalent employees, excluding coaching staff. The organizations reported annual revenue between \$1.0 million USD and \$2.0 million USD, with government funding ranging from \$100,000 to \$250,000 USD. These characteristics reflect the importance of membership dues, sponsorship, government funding, and other revenue

sources to the operation and survival of NPSOs.

The pre-COVID-19 sample included 980 respondents: 346 from NPSO1, 318 from NPSO2, and 316 from NPSO3. The post-COVID-19 sample included 946 respondents: 325 from NPSO1, 314 from NPSO2, and 307 from NPSO3. The gender distribution was comparable across the two time points, with 50.6% of the pre-COVID-19 sample and 50.8% of the post-COVID-19 sample identifying as male, and 49.4% and 49.2%, respectively, identifying as female. Approximately 89% of respondents at both time points were between 18 and 50 years of age. Approximately 73% identified as recreational or social participants, while 76% of the pre-COVID-19 sample and 71% of the post-COVID-19 sample reported participating in their sport between three and nine hours per week. More than 27% of respondents before COVID-19 and 31% after COVID-19 reported consuming content relating to their chosen sport for more than one hour per day. Full sample characteristics are presented in Tables 2 and 3.

**Table 2.***Descriptives of NPSO members*

| Variable                          | All N=980 pre<br>N= (946 post) |                | NPSO1 (N=346)<br>N= (325 post) |            | NPSO2 (N=318)<br>N= (314 post) |            | NPSO3 (N=316)<br>N= (307 post) |            |
|-----------------------------------|--------------------------------|----------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                                   | N                              | %              | n                              | %          | n                              | %          | N                              | %          |
| Gender                            |                                |                |                                |            |                                |            |                                |            |
| Male                              | 496(480)                       | 50.6(50.8)     | 174(165)                       | 50.3(50.6) | 159(158)                       | 50.0(50.1) | 163(157)                       | 51.3(51.5) |
| Female                            | 484(466)                       | 49.4<br>(49.2) | 172(160)                       | 49.7(49.4) | 159(156)                       | 50.0(49.9) | 153(150)                       | 48.7(48.5) |
| Age                               |                                |                |                                |            |                                |            |                                |            |
| Under 18                          | 70(69)                         | 7.1(7.3)       | 25(24)                         | 7.1(7.4)   | 25(25)                         | 7.8(8.0)   | 20(21)                         | 6.3(6.8)   |
| 18-25                             | 257(245)                       | 26.2(26.0)     | 94(86)                         | 27.2(27.4) | 81(79)                         | 25.4(25.1) | 82(79)                         | 25.9(25.7) |
| 26-35                             | 384(370)                       | 39.2(39.1)     | 133(128)                       | 38.6(40)   | 129(127)                       | 40.6(40.5) | 122(116)                       | 38.6(37.8) |
| 36-50                             | 234(223)                       | 23.9(23.5)     | 84(76)                         | 24.3(24.3) | 71(68)                         | 22.4(21.8) | 79(74)                         | 25.0(24.2) |
| Above 51                          | 35(39)                         | 3.6(4.1)       | 10(11)                         | 2.8(3.7)   | 12(15)                         | 3.8(4.6)   | 13(17)                         | 4.2(5.5)   |
| Participation Type                |                                |                |                                |            |                                |            |                                |            |
| Athlete                           | 955(922)                       | 97.4(97.5)     | 343(331)                       | 98.0(97.1) | 314(305)                       | 97.2(93.9) | 298(286)                       | 97.4(93.2) |
| Coach                             | 72(68)                         | 7.3(7.2)       | 31(29)                         | 8.7(8.9)   | 18(17)                         | 5.7(5.2)   | 23(22)                         | 7.5(7.2)   |
| Official                          | 24(22)                         | 2.4(2.4)       | 7(7)                           | 2.1(2.2)   | 9(8)                           | 2.8(2.5)   | 8(7)                           | 2.6(2.3)   |
| Volunteer                         | 55(49)                         | 5.6(5.2)       | 26(22)                         | 7.3(6.8)   | 12(11)                         | 3.7(3.4)   | 17(16)                         | 5.6(5.3)   |
| Parent                            | 85(83)                         | 8.6(8.8)       | 34(33)                         | 9.7(10.2)  | 24(24)                         | 6.9(7.4)   | 27(26)                         | 8.9(8.5)   |
| Participation Level               |                                |                |                                |            |                                |            |                                |            |
| Kids/<br>School/<br>Junior        | 85(85)                         | 8.6(9)         | 27(24)                         | 7.7(7.4)   | 30(30)                         | 9.6(9.5)   | 24(22)                         | 7.5(7.2)   |
| Recreational/<br>Social           | 713(683)                       | 72.8(72.3)     | 253(242)                       | 73.5(74.5) | 231(228)                       | 72.2(72.6) | 228(224)                       | 72.2(73.0) |
| Semi-Elite/<br>Elite/Pro          | 96(93)                         | 9.8(9.8)       | 33(31)                         | 9.4(9.5)   | 32(30)                         | 10.2(9.6)  | 34(32)                         | 10.8(10.4) |
| Senior/<br>Age Group              | 86(85)                         | 8.8(8.9)       | 33(28)                         | 9.4(8.6)   | 25(26)                         | 8.0(8.3)   | 30(29)                         | 10.5(9.4)  |
| Weekly Chosen Sport Participation |                                |                |                                |            |                                |            |                                |            |
| <1.5 hours                        | 24(49)                         | 2.4(5.2)       | 14(22)                         | 4.0(6.8)   | 8(12)                          | 2.5(3.8)   | 14(15)                         | 4.4(4.9)   |
| 1.6-2.5 hours                     | 98(141)                        | 10.0(14.9)     | 40(45)                         | 11.5(13.8) | 34(52)                         | 10.7(16.6) | 38(44)                         | 12.0(12.4) |

|                                 |          |            |          |            |          |            |          |            |
|---------------------------------|----------|------------|----------|------------|----------|------------|----------|------------|
| 2.6-3.5 hours                   | 177(153) | 18.0(16.2) | 61(52)   | 17.6(16)   | 58(49)   | 18.2(15.6) | 58(52)   | 18.3(18.6) |
| 3.6-4.5 hours                   | 326(297) | 33.3(31.4) | 104(95)  | 30.1(29.2) | 110(101) | 34.6(32.2) | 104(101) | 32.9(32.9) |
| 4.6-5.5 hours                   | 242(210) | 24.7(22.2) | 82(73)   | 23.7(22.5) | 75(69)   | 23.6(21.9) | 68(68)   | 21.5(20.8) |
| Over 5.5 hours                  | 113(96)  | 11.6(10.1) | 45(38)   | 13.0(11.7) | 33(31)   | 10.4(9.9)  | 34(27)   | 10.8(10.4) |
| Experience In Chosen Sport      |          |            |          |            |          |            |          |            |
| <1 year                         | 67(41)   | 6.8(6.5)   | 22(14)   | 6.6(4.3)   | 21(14)   | 6.8(4.5)   | 24(13)   | 6.5(4.2)   |
| 1-3 years                       | 105(89)  | 10.7(10.5) | 41(34)   | 12.0(10.5) | 32(26)   | 10.2(8.3)  | 32(28)   | 11.8(9.1)  |
| 4-6 years                       | 298(313) | 30.4(31.0) | 102(102) | 29.2(31.4) | 92(104)  | 28.8(33.1) | 104(109) | 32.6(35.5) |
| 7-9 years                       | 249(252) | 26.5(26.6) | 81(83)   | 23.4(25.5) | 81(78)   | 25.4(24.8) | 87(91)   | 27.5(29.6) |
| 10 years and over               | 261(250) | 25.6(25.4) | 100(92)  | 28.8(28.3) | 92(92)   | 28.8(29.3) | 69(66)   | 28.8(21.5) |
| Chosen Sport Internet Use Daily |          |            |          |            |          |            |          |            |
| 0 - 0.5 hours                   | 413(383) | 42.1(40.5) | 146(127) | 42.2(39.1) | 105(95)  | 33.0(30.3) | 162(161) | 51.3(52.5) |
| 0.6 – 1 hours                   | 283(257) | 28.9(27.2) | 102(105) | 29.5(32.3) | 85(78)   | 26.7(24.8) | 96(74)   | 30.4(24.1) |
| 1.1 - 1.5 hours                 | 192(201) | 19.6(21.2) | 66(65)   | 19.1(20.0) | 89(93)   | 27.9(29.6) | 37(43)   | 11.8(14.0) |
| 1.6 – 2 hours                   | 57(62)   | 5.8(6.6)   | 17(16)   | 4.9(4.9)   | 30(32)   | 9.4(10.2)  | 10(14)   | 3.1(4.6)   |
| 2.1 - 2.5 hours                 | 20(24)   | 2.0(2.5)   | 9(7)     | 2.6(2.2)   | 6(9)     | 1.9(2.9)   | 5(8)     | 1.5(2.6)   |
| Over 2.5 hours                  | 15(19)   | 1.5(2)     | 6(5)     | 1.7(1.5)   | 3(7)     | 0.9(2.2)   | 6(7)     | 1.9(2.3)   |

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*Note: Amounts in () = post - COVID-19.*

**Table 3.**

*Descriptive Statistics on Participation and Engagement Levels of Members*

| Variable                          | Women       |            |  | Men         |            |  | Age Above 36 |            |  | Age Under 36 |            |  | Participation Tenure 7+ years |            |  | Participation Tenure 0-6 years |            |  |
|-----------------------------------|-------------|------------|--|-------------|------------|--|--------------|------------|--|--------------|------------|--|-------------------------------|------------|--|--------------------------------|------------|--|
|                                   | n           | %          |  | n           | %          |  | n            | %          |  | n            | %          |  | n                             | %          |  | n                              | %          |  |
| Weekly Chosen Sport Participation | N=484 (466) |            |  | N=496 (480) |            |  | N=274(241)   |            |  | N=706(705)   |            |  | N=510(503)                    |            |  | N=470(443)                     |            |  |
| <1.5 hours                        | 16(38)      | 3.3(8.2)   |  | 8(11)       | 1.4(2.3)   |  | 12(16)       | 4.3(6.6)   |  | 12(33)       | 1.5(4.7)   |  | 9(11)                         | 1.7(2.2)   |  | 15(38)                         | 3.2(8.6)   |  |
| 1.6-2.5 hours                     | 60(89)      | 12.4(19.1) |  | 38(52)      | 8.9(10.7)  |  | 31(46)       | 12.8(19.1) |  | 67(95)       | 10.5(13.5) |  | 38(44)                        | 7.5(8.8)   |  | 60(97)                         | 12.7(21.9) |  |
| 2.6-3.5 hours                     | 95(80)      | 19.6(17.2) |  | 82(73)      | 15.1(15.2) |  | 67(51)       | 18.5(21.1) |  | 110(102)     | 15.5(14.5) |  | 76(79)                        | 14.9(15.7) |  | 101(74)                        | 21.5(16.7) |  |
| 3.6-4.5 hours                     | 158(129)    | 32.6(27.7) |  | 168(168)    | 33.3(35.0) |  | 89(62)       | 30.5(25.7) |  | 237(235)     | 33.2(33.3) |  | 166(159)                      | 32.5(31.6) |  | 160(138)                       | 34.0(31.1) |  |
| 4.6-5.5 hours                     | 108(89)     | 22.3(19.1) |  | 134(121)    | 27.4(25.2) |  | 61(43)       | 23.7(17.8) |  | 181(167)     | 26.2(23.7) |  | 170(157)                      | 33.3(31.2) |  | 72(53)                         | 15.3(12.0) |  |
| Over 5.5 hours                    | 47(41)      | 10.1(8.8)  |  | 66(55)      | 13.9(11.6) |  | 24(23)       | 10.2(9.5)  |  | 89(73)       | 13.1(10.4) |  | 83(75)                        | 16.3(14.9) |  | 30(21)                         | 6.4(4.7)   |  |
| Experience in the sport           |             |            |  |             |            |  |              |            |  |              |            |  |                               |            |  |                                |            |  |
| <1 year                           | 49(28)      | 15.7(6.0)  |  | 18(13)      | 5.5(2.7)   |  | 17(12)       | 8.8(4.9)   |  | 50(29)       | 7.1(4.1)   |  |                               |            |  | 67(41)                         | 14.2(9.3)  |  |
| 1-3 years                         | 69(60)      | 17.9(12.9) |  | 36(29)      | 10.5(6.0)  |  | 31(24)       | 12.4(9.9)  |  | 74(65)       | 10.5(9.2)  |  |                               |            |  | 105(89)                        | 22.3(20.0) |  |
| 4-6 years                         | 147(148)    | 26.1(31.8) |  | 151(165)    | 29.9(34.4) |  | 64(66)       | 19.7(27.4) |  | 234(247)     | 33.1(35.0) |  |                               |            |  | 298(313)                       | 63.4(70.6) |  |
| 7-9 years                         | 108(117)    | 20.1(25.1) |  | 141(135)    | 25.6(28.1) |  | 71(74)       | 24.8(30.7) |  | 178(178)     | 25.225.20  |  | 249(245)                      | 48.8(48.7) |  |                                |            |  |
| 10 years and over                 | 111(113)    | 20.2(24.2) |  | 150(138)    | 28.5(28.8) |  | 91(94)       | 34.3(39.0) |  | 170(157)     | 24.122.30  |  | 261(258)                      | 51.2(51.3) |  |                                |            |  |
| Chosen Sport Internet Use         |             |            |  |             |            |  |              |            |  |              |            |  |                               |            |  |                                |            |  |
| Daily                             | 212(181)    | 44.1(38.8) |  | 211(202)    | 42.3(42.1) |  | 140(151)     | 48.2(62.7) |  | 283(232)     | 40.1(32.9) |  | 222(213)                      | 43.5(42.3) |  | 201(170)                       | 42.8(38.4) |  |
| 0 - 0.5 hours                     |             |            |  |             |            |  |              |            |  |              |            |  |                               |            |  |                                |            |  |



|                    |          |            |          |            |          |            |          |            |          |            |          |            |
|--------------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|
| 0.6 – 1<br>hours   | 151(132) | 31.3(28.3) | 132(125) | 26.5(26.0) | 83(62)   | 29.2(25.7) | 200(195) | 28.3(27.7) | 149(133) | 29.2(26.4) | 134(124) | 28.5(28.0) |
| 1.1- 1.5<br>hours  | 94(104)  | 19.5(22.3) | 98(97)   | 19.8(20.2) | 34(16)   | 12.4(6.6)  | 158(185) | 22.4(26.2) | 89(93)   | 17.5(18.5) | 103(108) | 21.9(24.4) |
| 1.6 – 2<br>hours   | 14(30)   | 2.9(6.4)   | 33(32)   | 6.6(6.7)   | 9(7)     | 3.3(2.9)   | 38(55)   | 5.4(7.8)   | 29(37)   | 5.7(7.4)   | 18(25)   | 3.8(5.6)   |
| 2.1- 2.5<br>hours  | 8(11)    | 1.5(2.4)   | 12(13)   | 2.6(2.7)   | 5(3)     | 1.8(1.2)   | 15(21)   | 2.1(2.9)   | 11(15)   | 2.2(3.0)   | 9(9)     | 1.9(2.0)   |
| Over 2.5<br>hours  | 5(8)     | 0.8(1.7)   | 10(11)   | 2.2(2.3)   | 3(2)     | 1.1(0.8)   | 12(17)   | 1.7(2.4)   | 10(12)   | 1.9(2.4)   | 5(7)     | 1.1(1.6)   |
| IMC pur-<br>pose   |          |            |          |            |          |            |          |            |          |            |          |            |
| Informa-<br>tion   | 411(398) | 85.8(85.4) | 463(423) | 92.4(88.1) | 242(213) | 88.7(88.4) | 631(608) | 89.4(86.2) | 458(428) | 89.8(85.0) | 433(407) | 92.1(91.9) |
| Education          | 234(194) | 48.9(41.6) | 239(164) | 47.7(34.2) | 127(89)  | 46.4(36.9) | 346(269) | 49.0(38.2) | 268(229) | 52.5(45.5) | 265(221) | 56.4(49.9) |
| Entertain-<br>ment | 78(101)  | 16.3(21.7) | 76(121)  | 15.1(25.2) | 40(43)   | 14.6(17.8) | 114(179) | 16.1(25.4) | 81(124)  | 15.9(24.7) | 87(113)  | 18.5(25.5) |
| Interaction        | 101(146) | 21.1(31.3) | 139(142) | 27.7(29.6) | 58(65)   | 21.3(27.0) | 182(223) | 25.7(31.6) | 126(164) | 24.7(32.6) | 144(167) | 30.6(37.7) |
| E-com-<br>merce    | 114(61)  | 23.8(13.1) | 213(104) | 42.5(21.7) | 51(30)   | 32.6(12.4) | 277(135) | 39.2(19.1) | 177(115) | 35.1(22.9) | 134(89)  | 28.5(20.1) |

## Data Analysis

SPSS 25 and AMOS 22.0 were used to analyze the data. The analysis proceeded in four stages. First, Cronbach's alpha and construct reliability were examined to assess measurement reliability. Convergent validity was assessed using average variance extracted, while discriminant validity was examined by comparing the average variance extracted for each construct with the squared correlations between the respective constructs. Confirmatory factor analysis was then used to assess the fit of the structural model. Second, multigroup analysis was conducted separately for the pre- and post-COVID-19 samples. The first multigroup analysis examined differences across the three participating NP-SOs. The second examined differences across user groups based on gender, age, participation level, participation tenure, weekly participation time, and sport-specific internet use. Unconstrained models were compared with measurement-weight and structural-weight models using chi-square difference testing. Third, variance analysis and Tukey post-hoc testing were used to investigate differences in consumer perceptions across the participating NPSOs. Finally, regression analyses examined the capacity of gender, age, participation type, participation tenure, and sport-specific internet use to predict behavioral intentions before and after COVID-19.

For the user-group multigroup analyses, respondents were divided into male and female groups. Age was separated at 36 years, reflecting the median age of respondents. Participation level was divid-

ed into elite and non-elite groups, with the elite group including professional, semi-elite, and elite respondents and the non-elite group including kids, school, junior, recreational, social, senior, and age-group participants. Participation tenure was divided into fewer than seven years and seven years or more. Weekly participation time was divided into fewer than five hours and five hours or more, while sport-specific internet use was divided into fewer than 0.5 hours and 0.5 hours or more per day. Each major subgroup met the minimum sample requirement identified by Sudman (1976).

## Results

Reliability results for the measurement model (pre- and post-COVID-19 results) are also presented in Table 1. Cronbach's alpha and construct reliability values exceeded the recommended levels. Factor loadings ranged from 0.61 to 0.95, while all construct reliability values exceeded the recommended cut-off point of 0.60 (Bagozzi & Yi, 1988).

Convergent and discriminant validity were acceptable. Average variance extracted values exceeded 0.40 for all constructs, supporting convergent validity (Verhoef et al., 2002). Discriminant validity was demonstrated by average variance extracted values exceeding the squared correlations between the respective constructs. All constructs were positively correlated at the 0.01 significance level, with correlations ranging from 0.26 to 0.78. The strongest relationships were identified between functional and experiential benefits, functional benefits and satisfaction, and rela-

**Table 4a.**  
*Goodness of Fit*

| Moderating variables<br>$\chi^2/\text{df}$ |       |         | $\chi^2$ | GFI   | CFI   | NFI   | RM-SEA | SRMR  |
|--------------------------------------------|-------|---------|----------|-------|-------|-------|--------|-------|
| Pre - COVID-19                             | NPSO1 | 302.661 | 2.155    | 0.935 | 0.947 | 0.942 | 0.045  | 0.029 |
|                                            | NPSO2 | 195.090 | 1.561    | 0.926 | 0.955 | 0.939 | 0.038  | 0.030 |
|                                            | NPSO3 | 259.468 | 2.076    | 0.935 | 0.951 | 0.944 | 0.042  | 0.031 |
| Post – COVID-19                            | NPSO1 | 298.323 | 2.421    | 0.931 | 0.942 | 0.940 | 0.041  | 0.030 |
|                                            | NPSO2 | 183.611 | 1.488    | 0.929 | 0.952 | 0.938 | 0.039  | 0.031 |
|                                            | NPSO3 | 301.248 | 2.209    | 0.937 | 0.948 | 0.945 | 0.044  | 0.034 |

tionship quality and behavioral intentions. The structural model also demonstrated good fit:  $\chi^2 = 196.71$ ,  $\text{df} = 92$ ,  $\chi^2/\text{df} = 2.13$ ,  $\text{RMSEA} = 0.015$ ,  $\text{CFI} = 0.967$ ,  $\text{NFI} = 0.983$ , and  $\text{TLI} = 0.964$  (Hair & Anderson, 2009). The final structural model and its measurements are presented in Figure 1.

### **Multigroup Analysis Pre- and Post-COVID-19.**

Multigroup analysis was conducted separately for the pre- and post-COVID-19 samples. The first analysis examined differences across NPSO1, NPSO2, and NPSO3.

Table 4a presents the goodness-of-fit indices for the NPSO models. The  $\chi^2/\text{df}$  values were below 3.00 for each organization at both time points. GFI, CFI, and NFI values exceeded 0.90, while RMSEA and SRMR values were below 0.06. These results indicate that the model demonstrated acceptable fit for each participating NPSO before and after COVID-19 (Hair & Anderson, 2009).

Following assessment of model fit, unconstrained models were compared with measurement-weight and structur-

al-weight models. Measurement-weight models constrained the factor loadings to be equal across the corresponding groups. As shown in Table 4b, the measurement-weight models did not differ significantly from their corresponding unconstrained models for any of the three NPSOs at either time point. These results support measurement invariance across the organizational groups.

The structural-weight models differed significantly from the corresponding unconstrained models for all three NPSOs before and after COVID-19. Before COVID-19, significant structural-weight differences were identified for NPSO1,  $\Delta\chi^2 = 37.712$ ,  $p = .010$ ; NPSO2,  $\Delta\chi^2 = 17.781$ ,  $p = .012$ ; and NPSO3,  $\Delta\chi^2 = 44.746$ ,  $p = .001$ . After COVID-19, significant differences were also identified for NPSO1,  $\Delta\chi^2 = 35.455$ ,  $p = .014$ ; NPSO2,  $\Delta\chi^2 = 19.229$ ,  $p = .009$ ; and NPSO3,  $\Delta\chi^2 = 45.729$ ,  $p = .003$ . Significant structural-weight differences were identified across all three organizations before and after COVID-19, indicating structural non-invariance between the organizational groups.

**Table 4b.***Results of NPSO comparison among the models*

| Moderating variables<br>df | Model              |         | $\chi^2$ | $\Delta\chi^2$ | $\Delta df$ | P Value |
|----------------------------|--------------------|---------|----------|----------------|-------------|---------|
| Pre - COVID-19             |                    |         |          |                |             |         |
| NPSO1                      | Unconstrained      | 518.907 | 250      | —              | —           | —       |
|                            | Measurement weight | 535.409 | 263      | 16.502         | 13          | 0.223   |
|                            | Structural weight  | 556.619 | 270      | 37.712*        | 20          | 0.010   |
| NPSO2                      | Unconstrained      | 497.775 | 250      | —              | —           | —       |
|                            | Measurement weight | 504.947 | 263      | 7.172          | 13          | 0.893   |
|                            | Structural weight  | 515.556 | 270      | 17.781*        | 20          | 0.012   |
| NPSO3                      | Unconstrained      | 496.843 | 250      | —              | —           | —       |
|                            | Measurement weight | 505.279 | 263      | 8.437          | 13          | 0.814   |
|                            | Structural weight  | 541.588 | 270      | 44.746*        | 20          | 0.001   |
| Post - COVID-19            |                    |         |          |                |             |         |
| NPSO1                      | Unconstrained      | 521.727 | 250      | —              | —           | —       |
|                            | Measurement weight | 531.545 | 263      | 15.887         | 13          | 0.218   |
|                            | Structural weight  | 528.193 | 270      | 35.455*        | 20          | 0.014   |
| NPSO2                      | Unconstrained      | 481.433 | 250      | —              | —           | —       |
|                            | Measurement weight | 519.101 | 263      | 9.760          | 13          | 0.788   |
|                            | Structural weight  | 508.239 | 270      | 19.229*        | 20          | 0.009   |
| NPSO3                      | Unconstrained      | 488.017 | 250      | —              | —           | —       |
|                            | Measurement weight | 519.114 | 263      | 9.988          | 13          | 0.855   |
|                            | Structural weight  | 528.818 | 270      | 45.729*        | 20          | 0.003   |

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

### Differences in Construct Means Across NPSOs

Variance analysis was used to examine differences in functional benefits, experiential benefits, satisfaction, relationship quality, and behavioral intentions across the three NPSOs. The mean scores presented in Table 5 demonstrate a consistent pattern at both time points. Before COVID-19, NPSO2 and NPSO3 reported higher experiential-benefit scores than NPSO1. NPSO3 reported the highest

mean scores for functional benefits, satisfaction, relationship quality, and behavioral intentions, while NPSO1 reported the lowest mean scores for these constructs. The same general pattern was present after COVID-19. NPSO2 and NPSO3 reported higher experiential-benefit and functional-benefit scores than NPSO1, while NPSO3 reported the highest satisfaction, relationship-quality, and behavioral-intention scores.

**Table 5.***NPSO Construct Comparisons Before and After COVID-19*

|                       | NPSO1 |         | NPSO2 |         | NPSO3 |         |        |       |
|-----------------------|-------|---------|-------|---------|-------|---------|--------|-------|
| Variables             | Mean  | (SD)    | Mean  | (SD)    | Mean  | (SD)    | F      | P     |
| Pre - COVID-19        |       |         |       |         |       |         |        |       |
| Experiential Benefits | 4.488 | (2.208) | 5.493 | (2.137) | 5.457 | (2.140) | 10.036 | 0.004 |
| Functional Benefits   | 5.051 | (1.448) | 5.256 | (1.042) | 5.620 | (2.178) | 14.850 | 0.000 |
| Satisfaction          | 5.008 | (2.792) | 5.272 | (1.632) | 5.490 | (1.824) | 17.285 | 0.001 |
| Relationship Quality  | 4.963 | (1.525) | 5.175 | (1.618) | 5.288 | (2.160) | 25.501 | 0.000 |
| Behavioral Intentions | 4.977 | (2.735) | 5.021 | (1.767) | 5.512 | (1.542) | 37.541 | 0.002 |
| Post - COVID-19       |       |         |       |         |       |         |        |       |
| Experiential Benefits | 4.341 |         | 5.213 |         |       | (2.212) | 10.041 |       |
|                       |       | (2.145) |       | (2.004) | 5.255 |         |        | 0.003 |
| Functional Benefits   | 5.108 |         | 5.304 |         |       | (2.144) | 18.723 |       |
|                       |       | (1.527) |       | (1.615) | 5.324 |         |        | 0.000 |
| Satisfaction          | 4.875 |         | 5.134 |         |       | (1.699) | 19.521 |       |
|                       |       | (2.411) |       | (1.892) | 5.408 |         |        | 0.001 |
| Relationship Quality  | 4.762 |         | 4.822 |         |       | (2.009) | 28.718 |       |
|                       |       | (1.874) |       | (1.888) | 5.189 |         |        | 0.002 |
| Behavioral Intentions | 4.844 |         | 4.981 |         |       | (1.817) | 34.921 |       |
|                       |       | (2.222) |       | (1.913) | 5.314 |         |        | 0.001 |

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

### Multigroup Analysis Across User Groups

The second multigroup analysis examined differences across gender, age, participation level, participation tenure, weekly participation time, and sport-specific internet use. Goodness-of-fit indices for each subgroup are presented in Table 6a.

For all user groups at both time points,  $\chi^2/\text{df}$  values were below 3.00, GFI, CFI, and NFI values exceeded 0.90, and RMSEA and SRMR values remained below the recommended maximum value of 0.06. These results indicate that the structural model demonstrated acceptable fit across the user groups before and after COVID-19 (Hair & Anderson, 2009).

**Table 6a.** Goodness-of-fit indices for user-group structural models

| Moderating variables<br>$\chi^2/\text{df}$ |                                | $\chi^2$ |        | GFI   | CFI   | NFI   | RM-SEA | SRMR  |
|--------------------------------------------|--------------------------------|----------|--------|-------|-------|-------|--------|-------|
| Pre - COVID-19                             |                                |          |        |       |       |       |        |       |
| Age                                        | 18–35                          | 302.661  | 2.421  | 0.935 | 0.947 | 0.942 | 0.045  | 0.029 |
|                                            | More than 35                   | 195.090  | 1.561  | 0.926 | 0.955 | 0.939 | 0.038  | 0.030 |
| Gender                                     | Male                           | 259.468  | 2.076  | 0.939 | 0.951 | 0.944 | 0.042  | 0.031 |
|                                            | Female                         | 237.375  | 1.899  | 0.930 | 0.953 | 0.944 | 0.040  | 0.026 |
| Partic. Level                              | Elite/Semi elite /Professional | 227.468  | 1.820  | 0.929 | 0.951 | 0.938 | 0.043  | 0.030 |
|                                            | Non elite/social               | 266.835  | 2.135  | 0.940 | 0.952 | 0.948 | 0.040  | 0.027 |
| Partic. Tenure                             | Over 7 years                   | 238.871  | 1.911  | 0.931 | 0.950 | 0.940 | 0.043  | 0.032 |
|                                            | Under 7 years                  | 280.030  | 2.240  | 0.944 | 0.950 | 0.944 | 0.043  | 0.028 |
| Partic. Time                               | Under 5 hours                  | 287.611  | 2.511  | 0.939 | 0.946 | 0.944 | 0.041  | 0.030 |
|                                            | Over 5 hours                   | 213.495  | 1.978  | 0.938 | 0.958 | 0.937 | 0.038  | 0.030 |
| Sport Spec.                                | Under 0.5 hours                | 300.444  | 2.004  | 0.939 | 0.944 | 0.942 | 0.044  | 0.025 |
|                                            | Over 0.5 hours                 | 204.491  | 1.988  | 0.928 | 0.950 | 0.939 | 0.039  | 0.032 |
| Internet Use                               |                                |          |        |       |       |       |        |       |
| Post – COVID-19 Age                        |                                |          |        |       |       |       |        |       |
|                                            | 18–35                          | 312.119  | 2.312  | 0.937 | 0.945 | 0.944 | 0.041  | 0.028 |
|                                            | More than 35                   | 198.247  | 1.891  | 0.931 | 0.953 | 0.947 | 0.040  | 0.033 |
| Gender                                     | Male                           | 271.305  | 2.217  | 0.941 | 0.952 | 0.947 | 0.044  | 0.034 |
|                                            | Female                         | 256.405  | 1.909  | 0.932 | 0.949 | 0.942 | 0.041  | 0.029 |
| Partic. Level                              | Elite/Semi elite /Professional | 227.468  | 1.7987 | 0.931 | 0.950 | 0.941 | 0.046  | 0.032 |
|                                            | Non elite/social               | 291.414  | 2.223  | 0.942 | 0.948 | 0.945 | 0.038  | 0.029 |
| Partic. Tenure                             | Over 7 years                   | 285.192  | 1.947  | 0.933 | 0.944 | 0.941 | 0.045  | 0.031 |
|                                            | Under 7 years                  | 268.421  | 2.310  | 0.941 | 0.946 | 0.941 | 0.041  | 0.029 |



**Table 6b.** Measurement- and structural-weight comparisons across user groups

| Moderating variables<br>df     | Model              |         | $\chi^2$ | $\Delta\chi^2$ | $\Delta df$ | P Value |
|--------------------------------|--------------------|---------|----------|----------------|-------------|---------|
| Pre - COVID-19                 |                    |         |          |                |             |         |
| Age                            | Unconstrained      | 485.411 | 250      | —              | —           | —       |
|                                | Measurement weight | 505.312 | 263      | 19.901         | 13          | 0.312   |
|                                | Structural weight  | 516.555 | 270      | 31.144*        | 20          | 0.014   |
| Gender                         | Unconstrained      | 481.709 | 250      | —              | —           | —       |
|                                | Measurement weight | 494.827 | 263      | 13.118         | 13          | 0.788   |
|                                | Structural weight  | 501.516 | 270      | 19.807*        | 20          | 0.041   |
| Partic. Time                   | Unconstrained      | 481.249 | 250      | —              | —           | —       |
|                                | Measurement weight | 501.809 | 263      | 20.560         | 13          | 0.881   |
|                                | Structural weight  | 519.604 | 270      | 38.355         | 20          | 0.764   |
| Partic. Tenure                 | Unconstrained      | 477.811 | 250      | —              | —           | —       |
|                                | Measurement weight | 499.319 | 263      | 21.508         | 13          | 0.709   |
|                                | Structural weight  | 509.610 | 270      | 31.799*        | 20          | 0.002   |
| Partic. Level                  | Unconstrained      | 475.365 | 250      | —              | —           | —       |
|                                | Measurement weight | 486.603 | 263      | 11.238         | 13          | 0.898   |
|                                | Structural weight  | 504.801 | 270      | 29.436         | 20          | 0.856   |
| Sport Specific<br>Internet Use | Unconstrained      | 498.997 | 250      | —              | —           | —       |
|                                | Measurement weight | 502.505 | 263      | 3.508          | 13          | 0.541   |
|                                | Structural weight  | 505.777 | 270      | 6.780**        | 20          | 0.006   |
| Post - COVID-19                |                    |         |          |                |             |         |
| Age                            | Unconstrained      | 496.644 | 250      | —              | —           | —       |
|                                | Measurement weight | 511.487 | 263      | 16.325         | 13          | 0.288   |
|                                | Structural weight  | 529.378 | 270      | 26.419*        | 20          | 0.011   |
| Gender                         | Unconstrained      | 484.132 | 250      | —              | —           | —       |
|                                | Measurement weight | 498.854 | 263      | 11.404         | 13          | 0.655   |
|                                | Structural weight  | 504.451 | 270      | 21.657*        | 20          | 0.027   |
| Partic. Time                   | Unconstrained      | 491.713 | 250      | —              | —           | —       |
|                                | Measurement weight | 504.615 | 263      | 24.119         | 13          | 0.894   |
|                                | Structural weight  | 514.988 | 270      | 36.427         | 20          | 0.717   |
| Partic. Tenure                 | Unconstrained      | 462.152 | 250      | —              | —           | —       |
|                                | Measurement weight | 494.513 | 263      | 24.141         | 13          | 0.665   |
|                                | Structural weight  | 510.104 | 270      | 33.272*        | 20          | 0.004   |
| Partic. Level                  | Unconstrained      | 480.844 | 250      | —              | —           | —       |
|                                | Measurement weight | 489.615 | 263      | 14.332         | 13          | 0.811   |
|                                | Structural weight  | 512.444 | 270      | 28.798         | 20          | 0.944   |
| Sport Specific<br>Internet Use | Unconstrained      | 487.415 | 250      | —              | —           | —       |
|                                | Measurement weight | 504.322 | 263      | 5.531          | 13          | 0.377   |
|                                | Structural weight  | 509.410 | 270      | 8.413**        | 20          | 0.004   |

Table 6b presents comparisons between the unconstrained, measurement-weight, and structural-weight models. Measurement-weight comparisons were not significant for any of the user-group variables at either time point, supporting measurement invariance across the corresponding subgroups. Before COVID-19, significant structural-weight differences were identified for age,  $\Delta\chi^2 = 31.144$ ,  $p = .014$ ; gender,  $\Delta\chi^2 = 19.807$ ,  $p = .041$ ; participation tenure,  $\Delta\chi^2 = 31.799$ ,  $p = .002$ ; and sport-specific internet use,  $\Delta\chi^2 = 6.780$ ,  $p = .006$ . Structural-weight differences were not significant for weekly participation time or participation level.

The same pattern was identified after COVID-19. Significant structural-weight differences were identified for age,  $\Delta\chi^2 = 26.419$ ,  $p = .011$ ; gender,  $\Delta\chi^2 = 21.657$ ,  $p = .027$ ; participation tenure,  $\Delta\chi^2 = 33.272$ ,  $p = .004$ ; and sport-specific internet use,  $\Delta\chi^2 = 8.413$ ,  $p = .004$ . Weekly participation time and participation level did not demonstrate significant structural-weight differences. Age, gender, participation tenure, and sport-specific internet use demonstrated significant structural-weight differences at both time points.

### Prediction of Behavior Intentions

Regression analyses examined the capacity of gender, age, participation type, participation tenure, and sport-specific internet use to predict behavioral intentions (see Tables 7a and 7b). Separate analyses were conducted for the pre- and post-COVID-19 samples. The pre-COVID-19

model was significant,  $F = 28.21$ ,  $p < .001$ , and explained 37% of the variance in behavioral intentions,  $R^2 = .37$ , adjusted  $R^2 = .31$ . Gender, age, participation type, participation tenure, and sport-specific internet use were significant predictors of behavioral intentions. The post-COVID-19 model was also significant,  $F = 33.17$ ,  $p < .001$ , and explained 42% of the variance in behavioral intentions,  $R^2 = .42$ , adjusted  $R^2 = .34$ . Gender, age, participation type, participation tenure, and sport-specific internet use again returned significant results. The greater  $R^2$  value for the post-COVID-19 model indicates that the included user characteristics accounted for a larger proportion of the variance in behavioral intentions at the later time point.

### Discussion

The purpose of this study was to investigate the use of dIMC within NPSOs and the congruence between consumer perceptions, resulting attitudes, and behavioral intentions. While previous research has linked dIMC with positive organizational outcomes including participation, awareness, relationship development, and consumption (Achen, 2017; Bayle & Madella, 2002; Naraine & Parent, 2016; Whitburn et al., 2018, 2020), the present findings demonstrate that these relationships vary across organizations and consumer groups. Rather than functioning as a uniform communication strategy, the effectiveness of dIMC appears contingent on organizational delivery and consumer heterogeneity.

**Table 7a.***Regression Analyses for Variables Predicting Behavioral Intentions Pre-COVID-19*

| Variable                    | Behavioral Intentions (BI) Pre-COVID-19 |                   |         |
|-----------------------------|-----------------------------------------|-------------------|---------|
|                             | B                                       | Std.Error $\beta$ | Beta    |
| Gender                      | -2.17                                   | 0.54              | -0.58** |
| Age                         | 0.42                                    | 0.16              | 0.38**  |
| Participation Type          | 0.25                                    | 0.21              | 0.47*   |
| Participation Tenure        | 0.37                                    | 0.47              | 0.26*   |
| Sport Specific Internet Use | 0.48                                    | 0.24              | 0.39**  |
| R <sup>2</sup>              |                                         | 0.37              |         |
| Adjusted R <sup>2</sup>     |                                         | 0.31              |         |
| F                           |                                         | 28.21**           |         |

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Table 7b.***Regression Analyses for Variables Predicting Behavioral Intentions Post-COVID-19*

| Variable                    | Behavioral Intentions (BI) Post-COVID-19 |                   |         |
|-----------------------------|------------------------------------------|-------------------|---------|
|                             | B                                        | Std.Error $\beta$ | Beta    |
| Gender                      | -1.71                                    | 0.49              | -0.41** |
| Age                         | 0.60                                     | 0.32              | 0.28**  |
| Participation Type          | 0.32                                     | 0.28              | 0.40*   |
| Participation Tenure        | 0.31                                     | 0.41              | 0.41*   |
| Sport Specific Internet Use | 0.47                                     | 0.26              | 0.33**  |
| R <sup>2</sup>              |                                          | 0.42              |         |
| Adjusted R <sup>2</sup>     |                                          | 0.34              |         |
| F                           |                                          | 33.17**           |         |

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

### dIMC Perception Differences Across Organizations

Multigroup analysis identified differences in consumer perceptions across the three participating organizations before and after COVID-19. These differences extended across functional benefits, satisfaction, relationship quality, and behavioral intentions, indicating that similar orga-

nizations operating within the same sport delivery system can generate different consumer responses through their dIMC activities. This supports preceding research linking consumer perceptions and organizational behavior to behavioral intentions while extending that work by demonstrating variance across NPSOs (Kim, Trail, et al., 2011; Naraine & Parent, 2017).

The findings suggest that dIMC should not be treated as a standardized function that can be transferred across organizations without consideration of organizational characteristics, consumer expectations, and message content. Differences in consumer perceptions of functional benefits were associated with differences in satisfaction, relationship quality, and behavioral intentions. Consequently, NPSOs need to consider internal characteristics, including organizational culture and potential messaging bias, when developing dIMC content. A cut-and-paste or one-size-fits-all strategy may fail to satisfy the needs and wants of distinct consumer segments.

### **dIMC Perception Differences Across User Groups**

Sport consumers are not a homogeneous group but reflect a diverse range of values, attitudes, characteristics, and consumption preferences (Bayle et al., 2020; Whitburn et al., 2022). Analysis across demographic segments therefore provides important insight into how NPSOs can communicate more effectively and efficiently with their members and participants. This responds to calls for sport consumer research that moves beyond cross-sectional samples and investigates differences within sample populations (Funk et al., 2016).

The multigroup findings showed that age, gender, participation tenure, and sport-specific internet use moderated relationships within the dIMC function at both time points. These variables also predicted behavioral intentions in the

regression analyses. The greater predictive ability of the post-COVID-19 model suggests that differences across consumer groups became more important at the later time point. This reinforces the value of segmentation and the need to examine how unique groups respond to digital content rather than assuming similar perceptions and intentions across an entire consumer base.

The findings further illustrate the heterogeneous nature of sport consumer groups identified by Green et al. (2016) and Kwon et al. (2017). Even across organizations operating within the same delivery system and displaying similar characteristics, consumers differed in their perceptions and attitudes toward dIMC. Relationship quality and satisfaction were associated with behavioral intentions previously linked to participation and media consumption (Achen, 2017; Kwon et al., 2017; Whitburn et al., 2020). Accordingly, academics and practitioners should examine sport consumers at a more granular level across functional benefits, experiential benefits, satisfaction, relationship quality, and behavioral intentions.

The findings are consistent with research linking loyalty, relationship quality, and consumption behaviors (Whitburn et al., 2020), while extending this understanding into the not-for-profit sport context and across demographically distinct user groups. Participants from different sports, age groups, genders, participation-tenure groups, and levels of sport-specific internet use responded to dIMC in distinct ways. This provides

useful knowledge for understanding sport consumption and the operation of NPSOs in an environment characterized by stretched revenues and concerns regarding organizational sustainability (Mastromartino et al., 2020; Parent et al., 2018; Robinson & France, 2011).

Taken together, the findings suggest that dIMC effectiveness is determined not only by the quality of digital communication, but also by the extent to which communication aligns with organizational context and consumer expectations. As NPSOs continue operating within resource-constrained environments, segmentation and tailored messaging provide a practical mechanism for improving relationship quality and strengthening behavioral intentions (cf. Naraine et al., 2024). Specifically, it requires communication strategies aligned with the characteristics and expectations of distinct consumer groups (Karg et al., 2022).

### **Implications**

Practical implications for NPSOs and other organizations, within sports or in similar fields are numerous and fall into two major categories: organizational effectiveness and efficiency, and community building and social equity outcomes. Organizations who communicate with members and participants through dIMC can realize benefits in reaching and engaging with current and potential consumers ranging from increased purchase behavior, increased awareness, and positive word of mouth (Kim, Trail, et al., 2011; Whitburn et al., 2018). Findings from this

study highlight gender disparity in dIMC can create exclusionary perceptions in the affected market segment (women) with lower levels of relationship quality between the organization and consumers illustrated and decreases across a range of behavioral intentions and predicted actions discovered. As such, organizations with gender balanced content may experience higher consumer levels of weekly participation time, higher levels of volunteerism, longer tenure in being involved in the sport, more consumption of media published by the organization, more interaction with communications and more engagement in e-commerce opportunities.

From an organizational effectiveness and efficiency perspective, NPSOs experience a range of funding pressures, with the need to generate revenue from membership and participation rates acute (Bayle & Madella, 2002; Whitburn et al., 2018). Results of this study have shown that ignoring user groups (both consciously and unconsciously) in dIMC content and messaging can lead to decreased engagement, behavioral intentions, and consumer activities. For resource pressured NPSOs decreased engagement, behavioral intentions and consumer activities can prevent them from providing relevant sporting activities, with resources diverted to implement resource heavy promotion activities to attract new participants and members (Bayle & Madella, 2002; Whitburn et al., 2018; Winand et al., 2016).

Operationally, understanding the non-homogenous consumer base that sports need to service and the flow-on



importance of tailoring products, product attributes and communication strategies for different groups is clear (Green et al., 2016; Kwon et al., 2017). Specifically, targeting strategically chosen market segments will assist in fully leveraging these groups for organizational outcomes. Moreover, an effective dIMC strategy can lead to resource efficiency throughout organizations with these findings reinforcing the notion that research on segmentation has the potential extend to the strategies employed by sport organizations and athletes in enhancing engagement and fostering relationships with consumers (cf. Naraine, 2019).

### **Limitations and Further Research**

Limitations for this study centers on its focus on Australian NPSOs. Although the cases used for this study represent a small sector of the sporting landscape, they possess a well-defined set of characteristics, supporting applicability of the method, framework and results towards other sports and other contexts. The characteristics of Australian sport and NPSOs are potentially transferable across nations and other sporting bodies, allowing generalizability of results and applicability across sport organizations and not-for-profit organizations who identify the importance of dIMC in providing positive functional benefits. This also allows transference into similar contexts (health, arts, education) through similarities in programs and activities provided, corporate social responsibility requirements through multiple stakeholders, and the creation of social capital at the community level (Whitburn et al., 2018).

Given a key principle of IMC theory is the use a range of tools to achieve different, but interlinked, purposes, further research by the authors will explore the variance (if any) across dIMC channels (social media, NPSO website, emails) as opposed to aggregating them into a single content type in this study. Identifying and measuring variance across dIMC channels may reinforce extant IMC literature around the ability of different platforms to assist in achieving different organizational objectives.

Although falling outside of the immediate scope of this study, demographic statistics of respondents pre- and post-COVID-19, as discussed briefly above, offer some interesting insights supporting the findings of this research. Although caution must be taken if suggesting these changes in consumption are related to variation in perceptions of dIMC and behavioral intentions of respondents these possible correlations invite further research to extend on the findings of this paper to identify and measure any causation between consumption, perception and intentions.

### **Conclusion**

As many sports are trying to recover from decreased participation resulting from the pandemic lockdowns and restrictions, tailored, personalized dIMC messaging is an important tool to attract new participants and also re-engage with disengaged or disaffected members. This study identified that differences in dIMC content and resulting consumer perceptions exist across user groups within a population often treated as a homoge-



nous entity. Differences in consumer perceptions, behavioral intentions and actions of sport participants were identified across these user groups with differences highlighted between organizations, across gender, age and participation characteristics. It was found that a lack of focus or quality of content may lead to lower perceptions of the benefits of this messaging, lower satisfaction of this content, decreased relationship quality between consumers and the sport and lower levels of behavioral intentions. As such, distribution of dIMC content and messaging can be responsible for several negative organizational outcomes leading to ineffective and inefficient practice at a sport level and missed opportunities to provide social and community building access to sport opportunities through feelings of exclusion.

From a social and community perspective sport organizations need to refine practices with dIMC to provide equal opportunities for user groups including age, gender and participation types to participate in, and consume sporting content and opportunities provided. From an organizational perspective, this refinement of practice, and resulting positive behavioral intentions and actions. This can facilitate higher quality relationships with current and future members and participants driving positive consumer behavior closely linked to organizational outcomes desired and potentially lessen the need for resource heavy recruitment activities. In the current environment of a range of funding pressures on NPSOs and de-

mand for transparency in use of resources refinement of dIMC strategies based on tailoring messaging to reflect sub-groups of participants and members can provide organizations with a useful tool to assist in sustainability and viability.

## References

- Achen, R. M. (2017). Measuring social media marketing: Moving towards a relationship-marketing approach. *Managing Sport and Leisure*, 22, 33-53. <https://doi.org/10.1080/23750472.2017.1379883>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16, 74-94.
- Bamberg, S. (2003). How does environmental concern influence specific environmentally related behaviors? A new answer to an old question. *Journal of environmental psychology*, 23(1), 21-32.
- Bayle, E., & Madella, A. (2002). Development of a taxonomy of performance for national sport organizations. *European Journal of Sport Science*, 2, 1-21. <https://doi.org/10.1080/17461390200072205>
- Bayle, E., Lang, M., & Moret, O. (2020). How professional sports clubs exploit a heterogeneous local potential: the case of Swiss professional ice hockey. *Sport in Society*, 23(3), 433-451.
- Bryant, F. B., & Satorra, A. (2012). Principles and practice of scaled difference chi-square testing. *Structural equation modeling: A multidisciplinary journal*, 19(3), 372-398.

- Ding, D., Del Pozo Cruz, B., Green, M. A., & Bauman, A. E. (2021). Is the COVID-19 lockdown nudging people to be more active: a big data analysis. *British Journal of Sports Medicine*, 55(20), 1183-1190.
- Funk, D., Lock, D., Karg, A., & Pritchard, M. (2016). Sport consumer behavior research: Improving our game. *Journal of Sport Management*, 30, 113-116. <https://doi.org/10.1123/jsm.2016-0028>
- Funk, D. C., Ridinger, L. L., & Moorman, A. M. (2004). Exploring origins of involvement: Understanding the relationship between consumer motives and involvement with professional sport teams. *Leisure Sciences*, 26(1), 35-61.
- Green, B.C., Chalip, L., & Anderson, D. (2016). Using segmentation to understand sport fans. In *Routledge Handbook of Sport Communication* (pp. 297-310). Routledge.
- Hair, J. F., & Anderson, R. E. (2009). *Multivariate data analysis: A global perspective*. Pearson Prentice Hall.
- Hedenborg, S., Svensson, D., & Radmann, A. (2022). Global challenges and innovations in sport: effects of COVID-19 on sport. *Sport in Society*, 25(7), 1227-1230.
- Hoeber, L., Doherty, A., Hoeber, O., & Wolfe, R. (2015). The nature of innovation in community sport organizations. *European Sport Management Quarterly*, 15, 518-534. <https://doi.org/10.1080/16184742.2015.1085070>
- Hoeber, L., & Hoeber, O. (2012). Determinants of an innovation process: A case study of technological innovation in a community sport organization. *Journal of Sport Management*, 26, 213-223. <https://doi.org/10.1123/jsm.26.3.213>
- Karg, A., Shilbury, D., Westerbeek, H., Funk, D. C., & Naraine, M. L. (2022). *Strategic sport marketing*. Routledge.
- Kim, Y. K., Ko, Y. J., & James, J. (2011). The impact of relationship quality on attitude toward a sponsor. *Journal of Business and Industrial Marketing*, 26(8), 566-576.
- Kim, Y., Magnusen, M., Kim, M., & Lee, H. W. (2019). Meta-Analytic Review of Sport Consumption: Factors Affecting Attendance to Sporting Events. *Sport Marketing Quarterly*, 28(3).
- Kim, Y. K., Trail, G., & Ko, Y. J. (2011). The influence of relationship quality on sport consumption behaviors: An empirical examination of the relationship quality framework. *Journal of Sport Management*, 25, 576-592. <https://doi.org/10.1123/jsm.25.6.576>
- Kwon, H.H., Trail, G.T., & Anderson, D.F. (2017). Segmenting sport consumers by motives: A cross-cultural comparison. *Sport Marketing Quarterly*, 26(1), 22-36.
- Mahony, D. F., Madrigal, R., & Howard, D. (2000). Using the psychological commitment to team (PCT) scale to segment sport consumers based on loyalty. *Sport marketing quarterly*, 9(1).
- Mastromartino, B. M., Ross, W. J., Wear, H., & Naraine, M. L. (2020). Thinking outside the 'box': A discussion of sports fans, teams, and the environment in the context of COVID-19.

- Sport in Society*, 23, 1707-1723. <https://doi.org/10.1080/17430437.2020.1804108>
- Meiklejohn, T., Dickson, G., & Ferkins, L. (2016). The formation of interorganizational cliques in New Zealand rugby. *Sport Management Review*, 19, 266-278. <https://doi.org/10.1016/j.smr.2015.08.002>
- Moorman, C., Ryan, M., & Tavassoli, N. (2022). Why marketers are returning to traditional advertising. *Harvard Business Review*.
- Naraine, M.L. (2019). Follower segments with and across the social media networks of major professional sport organizations. *Sport Marketing Quarterly*, 28, 222-233. <https://doi.org/10.32731/SMQ.284.122019.04>
- Naraine, M. L., & Parent, M. M. (2016). Illuminating centralized users in the social media ego network of two national sport organizations. *Journal of Sport Management*, 30, 689-701. <https://doi.org/10.1123/jsm.2016-0067>
- Naraine, M. L., & Parent, M. M. (2017). This is how we do it: A qualitative approach to national sport organizations' social-media implementation. *International Journal of Sport Communication*, 10, 196-217. doi: 10.1123/IJSC.2017-0006
- Naraine, M. L., Thompson, A., Lachance, E. L., Séguin, B., Taks, M., Parent, M. M., & Hoye, R. (2024). Examining board and executive staff perceptions of social media in national sport organizations. *Journal of Global Sport Management*, 9, 464-484. <https://doi.org/10.1080/24704067.2022.2116591>
- Parent, M. M., Naraine, M. L., & Hoye, R. (2018). A new era for governance structures and processes in Canadian national sport organizations. *Journal of Sport Management*, 32, 555-566. <https://doi.org/10.1123/jsm.2018-0037>
- Robinson, S., & France, A. (2011). Comparing sports marketing of amateur team sports to professional team sports. *New Zealand Journal of Applied Business Research*, 9(1), 47-61.
- Sudman, S. (1976). Sample surveys. *Annual Review of sociology*, 2(1), 107-120.
- Thompson, A., Naraine, M. L., & Parent, M. M. (2024). Exploring the nexus of digital technology and organizational change in non-profit sport organizations. *Sport Management Review*, 27, 661-681.
- Tower, J., Jago, L., & Deery, M. (2006). Relationship marketing and partnerships in not-for-profit sport in Australia. *Sport Marketing Quarterly*, 15(3), 167-180.
- Verhoef, P. C., Franses, P. H., & Hoekstra, J. C. (2002). The effect of relational constructs on customer referrals and number of services purchased from a multiservice provider: does age of relationship matter?. *Journal of the academy of marketing science*, 30, 202-216.
- Whitburn, D., Karg, A., & Turner, P. (2018). Exploring e-promotion in sport national governing bodies. *International Journal of Sport Management and Marketing*, 18, 376-401. <https://doi.org/10.1504/IJSMM.2018.094345>
- Whitburn, D., Karg, A., & Turner, P. (2020). The effect of digital integrated marketing communications on not-for-profit sport consumption behaviors. *Journal of Sport Management*, 34, 417-434. <https://doi.org/10.1123/jsm.2019-0306>

- Whitburn, D., Taylor, C., Turner, P., & Karg, A. (2022). The Effects of Sport Organization Messaging Bias on Consumers: A Gender Focus. *International Journal of Sport Communication*, 15, 218-232
- Wicker, P., Breuer, C., & Hennings, B. (2012). Understanding the interactions among revenue categories using elasticity measures – evidence from a longitudinal sample of non-profit sport clubs in Germany. *Sport Management Review*, 15, 318-329. <https://doi.org/10.1016/j.smr.2011.12.004>
- Winand, M., & Hoeber, L. (2017). Innovation capability of non-profit sport organisations. In V. Ratten and J. J. Ferreira (Eds.), *Sport entrepreneurship and innovation*. Routledge.
- Winand, M., Scheerder, J., Vos, S., & Zintz, T. (2016). Do non-profit sport organizations innovate? Types and preferences of service innovation within regional sport federations. *Innovation*, 18, 289-308. <https://doi.org/10.1080/14479338.2016.1235985>
- Winand, M., Zintz, T., & Scheerder, J. (2012). A financial management tool for sport federations. *Sport, Business and Management*, 2, 225-240. <https://doi.org/10.1108/2042678121126153>