A mixed-methods examination of a mental health awareness program in elite ice hockey

Abstract

In partnership with the Canadian Mental Health Association, Ontario Division, the purpose of this study was to conduct a postseason evaluation of the effectiveness of a mental health and suicide-awareness program called Talk Today, delivered to elite adolescent male hockey players and their support staff. The study was conducted using a sequential explanatory mixed-methods design that began with a quantitative phase followed by a qualitative phase. In total, 105 participants (49 athletes, 56 staff) completed online questionnaires and 12 (6 athletes, 6 staff) participated in qualitative interviews. Results integrated quantitative and qualitative findings to examine participants' perceptions of acceptability of the program, acquisition and application of knowledge, and perceptions of stigma following the program. Findings revealed that 78% of athletes and 90% of staff reported high levels of satisfaction with the program, 85% of athletes and 87% of staff felt they acquired knowledge on mental health including access to resources, and 68% of athletes and 87% of staff felt they could provide more effective support to individuals with mental health issues. Participants felt the program helped them to identify, approach, and support someone experiencing mental health issues. Additionally, participants reported lower levels of personal stigma in comparison to levels of public stigma towards persons with mental health problems. Overall, results suggest a high level of openness to a mental health and suicide-awareness program among elite male adolescent athletes. Given that this group typically holds negative attitudes towards mental health, these findings are promising for the future implementation of such programs.

Keywords: stigma, elite sport, male adolescents, support staff

In recent years, a growing body of research has focused on the mental health of athletes (e.g., Henriksen et al., 2020; Schinke et al., 2018). Although participation in organised sport has been associated with many positive outcomes such as enhanced well-being and social and emotional functioning (Bloom et al., 2020; Fraser-Thomas & Côté, 2009), research has also found that athletes are not impervious to various mental illnesses (Hammond et al., 2013; Henriksen et al., 2020; Rao et al., 2015; Schinke et al., 2018). Specifically, mental illnesses are defined by alterations in an individual's feelings, thoughts, and behaviours that lead to significant distress and impaired functioning in usual activities (World Health Organization, 2018). These conditions that cause clinically significant distress and meet certain diagnostic criteria (as identified by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition) include illnesses such as major depressive disorder and anxiety disorder (World Health Organization, 2018). Furthermore, if mental illnesses are left untreated, individuals can be at increased risk for suicide (Rao & Hong, 2020). However, individuals may also experience symptoms of mental illness that do not meet the diagnostic criteria yet still negatively impact their daily functioning (Keyes, 2002). The subclinical levels of psychological distress that are experienced and affect one's functioning are a growing concern.

Individuals experiencing symptoms of mental illness that do not meet the criteria for a specific diagnosis are on the rise (Rice et al., 2016; Shapiro et al., 2016; Sullivan et al., 2019). More precisely, one in five people in Canada will personally experience a mental health problem each year (Mental Health Commission of Canada, 2013). Related to this, elite athletes have reported experiencing comparable or slightly elevated rates of mental health problems relative to the general population (Gouttebarge et al., 2019; Hammond et al., 2013; Rice et al., 2016), which might be attributed to the range of unique stressors they encounter throughout their careers

(Henriksen et al., 2020; Schinke et al., 2018). For example, a recent systematic review and meta-analysis assessing the occurrence of mental health problems and illnesses among current and former elite athletes from a variety of sports revealed that self-reported symptoms of distress, sleep disturbance, anxiety/depression, and alcohol misuse ranged from 19% to 34% for current athletes and 16% to 26% for former elite athletes (Gouttebarge et al., 2019). Athletes are also not spared from the threat of suicide (Rao & Hong, 2020). Consequently, access to mental health support services for elite athletes is critical. However, this access is often limited by the perceived stigma associated with seeking mental health support (Gulliver et al., 2012).

Within the context of elite sport, research has shown that athletes are reluctant to seek help for mental health problems, especially due to the stigma attached to it, which is often categorised as perceived public stigma and self-stigma (Gulliver et al., 2012; Rice et al., 2016). Perceived public stigma refers to an individual's perception regarding stereotypes, prejudice, and discrimination held by the public toward people with mental illness, which may result in athletes avoiding seeking help in order to not appear as mentally weak, fragile, and/or inadequate by their coaches and teammates (Rao & Hong, 2020). Self-stigma refers to the internalisation of public stigma by incorporating others' stereotypes about people with mental illness into beliefs about oneself, which may adversely affect athletes' self-esteem, self-confidence, and self-efficacy (Rao & Hong, 2020). Given that stigmatising attitudes towards mental health are among the most significant barriers to help seeking and the provision of help (Gulliver et al., 2012; Hart et al., 2016), there is a need to further target these attitudes when developing and implementing mental health programs for athletes (Wynters et al., 2021). As such, initiatives and strategies that aim to reduce mental health stigma in sport are important to prevent mental illnesses among athletes.

Various programs have been developed with the aim of educating individuals and reducing stigmatising attitudes towards mental illness and help-seeking (Breslin et al., 2017; Chow et al., 2021). In particular, male adolescent athletes have been targeted in various mental health programs (Liddle et al., 2021; Swann et al., 2018), partly because adolescence and young adulthood are peak periods of manifestation for mental illnesses (National Institute of Mental Health, 2017). Additionally, males have been recognised as among the least likely to avail themselves of mental health services due to the stigma associated with seeking help (Gulliver et al., 2012). To address this matter, Liddle et al. (2021) recently conducted a randomized-controlled trial assessing the effects of a 45minute sport-based mental health literacy program among adolescent males (ages 12–19) from an amateur community soccer club in Australia. Among the findings, compared to a wait-list control group, participants who received the Help Out a Mate program demonstrated increased intentions to provide help towards a friend experiencing psychological distress and improved knowledge about depression and anxiety (Liddle et al., 2021). Although findings suggest that programs can lead to various positive outcomes (e.g., improve knowledge, attitudes, intentions to seek help), it appears that stigma is a variable that is resistant to change (Rao & Hong, 2020; Wynters et al., 2021). This may be due to the sports culture, where disclosing mental health issues may be perceived as a weakness (Bauman, 2016). Given that coaches and support staff are influential in the development of organisational culture (Mallett & Lara-Bercial, 2016; Urquhart et al., 2020), there is a need to explore how the involvement of stakeholders within sport organisations (e.g., coaches, support staff) can contribute to creating a culture of acceptance in which athletes feel comfortable disclosing their mental health concerns (Rao & Hong, 2020).

The coach has been identified as a key figure in creating an environment that supports the mental health of athletes (Duffy et al., 2021; Lebrun et al., 2020). As a result, athletes have reported being more likely to engage in help-seeking behaviours when their coach was understanding and supportive (Gulliver et al., 2012). However, coaches and support staff are currently not required to undergo any mental health training in different countries (e.g., UK, Australia, Canada) and have reported lacking the skills and knowledge to fulfil their role (Lebrun et al., 2020; Sebbens et al., 2016; Sullivan et al., 2019). Therefore, educating coaches and support staff will allow them to better support their athletes while creating an environment that is conducive to addressing aspects of athlete mental health.

Given male adolescent athletes' risk in experiencing psychological distress in the elite sport environment and the role of the coach and organisation in supporting athletes' mental health, the purpose of the current mixed-methods study was to evaluate the effectiveness of a mental health and suicide-awareness program that was delivered to elite male hockey players and their support staff. This was a multi-faceted program that sought to increase the provision of social support for athletes, and to educate, raise awareness, decrease stigma regarding mental health issues (including issues pertaining to suicidality) in elite athletes and their support staff. To evaluate the program, Kirkpatrick's four-level (reaction, learning, behaviour, results) model of program evaluation was utilised (Kirkpatrick & Kirkpatrick, 2016). More specifically, this model has a goal-based approach and has been shown to be effective in evaluating training outcomes while also assessing the extent to which trainings have achieved certain objectives across a variety of organisational settings (Kirkpatrick & Kirkpatrick, 2016). In sum, the

purpose of this study was guided by the following research objectives: (1) evaluate the acceptability of the program (i.e., reaction), (2) examine the acquisition and application of knowledge related to the program (i.e., learning, behaviour), (3) examine perceptions of stigma as an outcome of participation (i.e., results).

Methods

This study used a sequential explanatory mixed-methods design to provide more complete and corroborated results, which involved a two-phased approach where qualitative findings provided additional support to the initial quantitative data (Creswell & Plano Clark, 2018). The decision to start with the quantitative data was due to the awareness of the stigma associated with choosing to speak about mental health issues in an elite athlete context and the belief that we would obtain a more diverse sampling of responses with an anonymous survey as a starting point. Following this, the qualitative data collection and analysis took place following a descriptive qualitative methodological approach (Sandelowski, 2010). To this end, quantitative questionnaires (i.e., Phase 1) were followed by semi-structured qualitative interviews (i.e., Phase 2) to provide depth and explanation to the quantitative findings. Ultimately, both phases complement one another with the overarching objective of addressing the four phases of the Kirkpatrick Model.

Importantly, the findings from this study rely on the researchers' interpretation of the participants interpretations (i.e., double hermeneutic; see Danermark et al., 2019), which suggest that the researcher's subjective past-experiences, assumptions, and ideas result in biases that cannot be limited and play an important role in the selected methodological approach. The research team's combined personal and research-based expertise shaped all aspects of the study. For example, the first author has close ties to elite hockey as both a researcher and consultant.

These experiences likely facilitated knowledge sharing during the qualitative interviews. The second author is a doctoral student studying mental health in elite sport. The third author works for a community based mental health non-profit, charitable organisation and manages the program being evaluated. The fourth author has over 25 years' experience working as a researcher in the area of mental health programming for youth and young adults, as well as with advocacy in the field, frequently in partnership with community organisations. The fifth author has been involved in the sport of hockey for nearly 50 years, as an athlete, coach, referee, and researcher. The authors each bring their own unique experiences, which resulted in complex multiple perspectives that informed all aspects of the study, such as the planning of the research, the data collection, the analysis, and the interpretation of the findings. As an example, researchers combined backgrounds, experiences, and expertise with mental health (e.g., content expert vs. content novice), elite sport (e.g., athlete vs. non-athlete), contributed to diverse interpretations of the findings and fostered stimulating discussion during the data analysis.

Mental Health and Suicide-Awareness Program Design

The study was conducted in partnership with the Canadian Mental Health Association (CMHA), Ontario Division. CMHA Ontario was responsible for designing and delivering the program whereas the research team was responsible for the evaluation. The researcher–CMHA partnership was initiated by CMHA Ontario as they sought a third-party independent research evaluation of their program. They provided funds to cover costs for the research to be conducted as agreed in a formal research agreement. It is important to note that in accordance with the university ethics and research guidelines, the research agreement stipulated that the evaluation and resultant publications or conference presentations would share the findings accurately, without prejudice, stated as follows It is understood by all parties that (the university researchers

/ university partner) will provide an accurate and objective evaluation of the program, identifying strengths and areas for improvement in the report.

CMHA Ontario designed the mental health awareness program, called Talk Today (see Ontario Hockey League, 2021), which was delivered to the major junior ice-hockey players (aged 16–20) and their support staff (e.g., coaches, team staff) who participated in this study. The program was a comprehensive multi-faceted mental health awareness program to help educate, support, and raise awareness about mental health issues, including the issue of suicidal ideation. First, at the start of the season, athletes received a 3-hour suicide alertness workshop called "safeTALK[1]", which was delivered by trained and certified facilitators from CMHA branches. The workshop was designed to provide people with the information and knowledge to recognise and support individuals who are struggling with thoughts of suicide. Second, each team was provided with a designated "mental health coach" who's role was to provide resources and ongoing mental health support to the players and the people that surrounded them. Most commonly, this was a trained professional in their community, such as a CMHA branch representative. Third, each team appointed a "mental health champion" to act as liaison between the team and the CMHA branch. The mental health champion was typically someone with a close connection to the athletes (such as a trainer, physiotherapist, etc.) and was accessible to players if they felt they had a mental health challenge. Lastly, each team hosted a game day event designed to increase awareness about mental health in their community. By participating in a game day mental health awareness event, athletes and staff are provided an opportunity to take an active role in spreading awareness and reducing stigma associated with mental health by creating videos and holding up placards that are displayed during the game and on social media.

Participants

Athletes and staff who had participated in the mental health awareness program were recruited for our study. In total, 105 participants completed online questionnaires and 12 participants participated in qualitative interviews. The participants for the online questionnaires consisted of 49 athletes and 56 staff. The athletes included 27 forwards, 16 defensemen, and 5 goalies. At the time of completion, athletes had been playing in the Canadian Hockey League (i.e., Major Junior) for 2.2 years on average. The staff included ownership (n = 2), management (n = 13), coaches (n = 9), trainers (n = 8), and other individuals (i.e., billet parent, community relations person, marketing specialist, n = 24). Staff had been working in the league for 7.5 years on average (range = 1–25 years). The participants for the qualitative interviews consisted of six athletes (*A1–A6*) and six staff (*S1–S6*) representing six teams in the league. Furthermore, five athletes (*A7–A11*) and 25 staff (*S7–S31*) provided qualitative feedback to the one open-ended question in the quantitative evaluation questionnaire (see "data collection"), and this data was integrated into the qualitative data set.

Post-Season Data Collection

The sequential explanatory mixed-methods post-season/post-program evaluation was conducted over two phases, a quantitative phase, followed by a qualitative phase.

Phase 1: Online Quantitative Questionnaire

After obtaining approval by the authors' institutional Research Ethics Board, athletes and support staff who took part in the mental health awareness program were recruited to participate in the study. Specifically, at the end of the hockey season, the CMHA provided an online survey link to the league front office who subsequently distributed the link to each player and team member who participated in the program. After providing consent, participants were asked to complete the online quantitative questionnaire during which they were asked to: (1) assess their

perceptions of the program (i.e., program acceptability, knowledge acquisition, knowledge application), (2) assess their levels of stigma towards mental illness, and (3) provide open-ended feedback about the program. The questionnaires took approximately 10–15 min to complete.

Athlete and staff perceptions of the program were measured using a program satisfaction scale composed of 8 items. The first item measured participants' perceptions of their acquisition of mental health knowledge (i.e., acquisition of knowledge) on a 4-point Likert scale ranging from 1 (*nothing*) to 4 (*a lot*). The second item measured the participants' perceptions of their willingness to use strategies learned in the program (i.e., application of knowledge) on a 5-point Likert scale ranging from 1 (*not at all likely*) to 5 (*very likely*). Lastly, the next 6 items evaluated participants' perceptions of the content, delivery, and value of the program (i.e., program acceptability) across 6 items on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Although this scale has not been validated, it has previously been used in a number of studies (Carsley et al., 2018; Shapiro et al., 2016). The current sample resulted in a good reliability estimate for the program satisfaction scale ($\alpha = .92$).

Athletes and staff perceptions of stigma were measured using the short form of the self-stigma of mental illness scale (SSMIS-SF; Corrigan et al., 2012). The SSMIS-SF was used to measure participants' stereotype awareness (i.e., "I think the public believes…") and stereotype agreement (i.e., "I think …"). This scale consists of 10 items on a 9point Likert scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). The SSMIS-SF has been demonstrated to be both valid and reliable (α's = .65 – .87; Corrigan et al., 2012). The current sample resulted in an adequate reliability estimate for both subscales of the SMMIS-SF – stereotype awareness (α = .80) and stereotype agreement ($\alpha = .82$).

Open-Ended Feedback. The final section provided participants with the opportunity to provide written feedback to the following open-ended question: "If you would like, we would value your thoughts and feedback on the program". The data acquired from this question was added to the qualitative phase.

Phase 2: Qualitative Interviews

To provide depth and explanation to the quantitative findings, some participants from phase 1 volunteered to participate in phase 2, which was a semi-structured audio-recorded qualitative interview conducted over the phone. Specifically, at the end of the questionnaire, participants were invited to participate in the qualitative interviews. Interviews ranged between 13:35 and 99:37 min in duration (M = 32:40; SD = 23:38). An open-ended interview guide[2] was used to guide the semi-structured interviews with the staff and athletes who participated in the program. Notably, the interview guide was: (a) informed by the authors' experiences and literature related to elite hockey and mental health, (b) created in collaboration with the CMHA given their knowledge and understanding of the specific context, and (c) designed to target the four levels of the Kirkpatrick Model: reaction, learning, behaviour, results (Kirkpatrick & Kirkpatrick, 2016). Prior to the start of phase two, the interview guide was piloted with an elite athlete in the same age group as the athlete participants. In addition, the interview guide was further refined following the acquisition of the quantitative data. For instance, the participants' high scores on the program satisfaction scale led the research team to include additional prompts about what contributed to high levels of acceptability (i.e., what did they like about the program). As another example, the athletes indicated feeling better prepared to support their peers as a result of the program, therefore additional questions were included in the interview guide about the behaviours they engaged in to support their peers.

The interview guide consisted of four sections. First, participants were asked introductory questions designed to establish rapport and provide context (e.g., Please tell me about your role on the team?). Second, participants were asked their thoughts about different components of the program, such as the workshop, the designated mental health coach / champion, and the game day event (e.g., What are your thoughts about the delivery of information in the workshop?). Third, participants were asked what they learned about the program and if they were able to apply any of this knowledge (e.g., What, if anything, do you feel you have learned? How have you applied the knowledge and skills taught during the program?). Finally, participants were asked about the impact of the program (e.g., What, if anything, do you feel has changed as a result of the program?). At the end of each interview, participants were given the opportunity to clarify any statements made during the interview, offer additional insights and comments, or ask the interviewer questions.

Data Analysis

Statistical analyses were conducted using SPSS version 21.0. Variables were screened for missing data, outliers, normality, and linearity prior to analyses, and were dealt with using appropriate statistical techniques when necessary (e.g., expectation maximisation, listwise deletion; Tabachnick & Fidell, 2012). In addition, all assumptions were met prior to conducting inferential statistics (e.g., ANOVA). First, descriptive statistics (e.g., means, standard deviation, range), reliability estimates (i.e., Cronbach's alpha coefficients), and correlations were calculated. Following this, three chi-squared tests were conducted to provide comparisons between athletes and staff across the following dependent variables: program acceptability, acquisition of knowledge, application of knowledge. Lastly, stigma was measured using a 2 × 2 mixed-factorial ANOVA. The within-subject independent variable contained two levels: self-

stigma and public stigma. The between-subject independent variable contained two levels: athletes and staff. The depended variable was perceptions of stigma.

Next, using a codebook approach (see Braun et al., 2018), Braun et al.'s (2016) guidelines for thematic analysis were used to construct patterns in the qualitative dataset, whereby the development of themes was guided by the interview guide, which served as a coding frame. Notably, this approach aligns with our descriptive qualitative approach given that thematic analysis is theoretically flexible. The thematic analysis used an abductive approach, whereby patterns and themes were constructed inductively within a broader set of overarching themes that were deductively aligned with the research questions, the quantitative findings, and the four levels of the Kirkpatrick Model (Kirkpatrick & Kirkpatrick, 2016). Accordingly, the primary investigator began the process of familiarisation by immersing himself in the data, whereby he listened to audio recordings and/or by reading transcripts. Next, the codebook was developed by inductively coding meaning units using Nvivo 11 software and assigning labels, definitions, and examples for each code. The codebook was then implemented to all the data, followed by organising and clustering the codes into higher level patterns. This involved developing, refining, and naming themes and subthemes, which were deductively grouped into overarching themes in accordance with the four levels of the Kirkpatrick Model: reaction, learning, behaviour, results (Kirkpatrick & Kirkpatrick, 2016). Accordingly, the data analysis resulting in four overarching themes and six subthemes. The overarching themes include (1) program acceptability (3 subthemes), (2) acquisition of knowledge (3 subthemes), (3) application of knowledge, and (4) program outcomes (i.e., stigma). Of note, the thematic analysis was conducted recursively and occurred throughout the collection of data, starting with the first interview.

Mixed-Methods Evaluation Criteria

As a justification for the trustworthiness and mixed-methods integrity of the study, we selected the following list of socially-constructed evaluation criteria: (1) rich rigour, (2) resonance, (3) significant contribution (Burke, 2016; Levitt et al., 2018; Smith & McGannon, 2018; Sparkes, 2015; Sparkes & Smith, 2009). First, rich rigour was integrated into the design of the study by using a mixed-methods evaluation where the quantitative and qualitative complemented one another and where the evaluation was grounded in a sound framework (i.e., Kirkpatrick's four-phase program evaluation model; Kirkpatrick & Kirkpatrick, 2016). Second, resonance was accomplished by means of aesthetic merit, where the results sought to integrate the quantitative and qualitative findings in a clear and concise manner while stimulating evocative representations of the findings (e.g., resonating the participant's experiences via rich and vibrant quotations). Third, the study provided a significant contribution on a theoretical, practical, and methodological level. Specifically, this study contributes to the theoretical and practical understanding of the mental health and elite sport literature by using a sound mixed-methods methodological approach to examine an important topic (e.g., mental health stigma) in a unique population (e.g., elite ice hockey). Lastly, in accordance with Creswell and Plano Clark's (2018) identification of a good-quality mixed-methods study, this study: "collects and analyzes both qualitative and quantitative data … intentionally integrates (or mixes or combines) the two forms of data and their results, organises these procedures into specific research designs that provide the logic for conducting the study" (p. 804).

Results

To address the research questions, the results include three sections that each provide an integration of the quantitative and qualitative findings: (a) the participants' perceptions of

acceptability of the program, (b) the acquisition and application of knowledge gained from the program, and (c) the participants' perceptions of stigma following the program.

Program Acceptability

The findings indicated that athletes and staff perceived high levels of acceptability across all items of program satisfaction (range = 81.37–91.18%; see Table 1). Specifically, 78% of athletes and 90% of staff "agreed" or "strongly agreed" that they were overall satisfied with the program (see Figure 1), although this difference was not statistically significant ($p = .196$).

To provide more depth to the quantitative findings, during the qualitative interviews the research team asked participants to further describe their perceptions about various aspects of their levels of acceptability in more detail. Specifically, this overarching theme was split into three subthemes, which included the value and importance of the program, "the how" of program delivery, and "the when" of program delivery. Accordingly, the qualitative findings indicated that the participants unequivocally expressed the value and importance of athletes, coaches, and other staff participating in the program. For instance, according to S4 (Coach): "I think it's imperative in today's years. Mental health and awareness is one of the number one things that should be taken care of in junior hockey." Likewise, A2 added: "This is really important. Especially nowadays with mental health skyrocketing, I think everyone should learn this. Especially with young guys moving away, I think that [the program] benefitted us really well". In fact, this program was said to be equally valuable for all individuals across teams so that athletes are provided with a great deal of support. For instance:

> I'm a big believer in making sure those boys take it, as well as anybody involved in the hockey club. That goes down to the equipment manager, the assistant coach, a trainer, even the team doctor. Anybody who's involved with the team. The more people that

> know about the program, the safer the athletes are. (S3, Billet Parent)

> The reality of junior hockey is that many players, especially at that age, will deal with some type of mental health issue so I do believe it is especially important for the adults in charge of the players to be equipped to deal with it and understand it as much as possible. (S9, Unspecified)

Furthermore, the participants expressed many positive comments in regard to *how* and *when* the program was delivered. Regarding how the program was delivered, the participants felt that the facilitators were professional, personable, and trustworthy. This was important to the athletes in case they needed to bring up a sensitive matter:

> They seemed like personable people that you can text or call whenever you had a mental health problem. They seemed trustworthy and they really made an effort at the start to gain our trust and to let us know that they understand and that they can help us. (A1)

When asked about the delivery of the program, the participants also expressed that the instructors were effective at communicating the content, as noted by one of the athletes: “They did a really good job keeping it interesting, keeping your attention drawn, and giving you a break so you don’t get too worn. Then, come back, get refocused, and it was good” (A5). Likewise, S2 (Billet Parent) added: “The staff that are doing it are very professional. We’ve had the same woman three or four years now, she’s excellent, she’s a good presenter, she’s engaging.” Furthermore, the participants highlighted during the interviews that their favourite aspect of the presentation was the interactive activities and role playing. For instance, A6 noted:

> I think it's just how everybody was interacting with each other and it wasn't just a sit back and listen kind of thing. It was "Here's this certain way of doing it. Now, let's put that into practice and have some kind of real-life scenarios on how you might be able to use this". I think that was pretty cool to be practicing firsthand and being able to see where we might be able to use them in the future.

Collectively, these two aspects seemed to play a major role in the level of engagement with the program and also helped athletes understand and remember information. Next, when asked about the timing of the program, the participants unanimously appreciated the program taking place in the early part of the season, if not right at the beginning in order to "get those skill sets in the back of your mind right away" (A6). For instance, according to S1 (Community Relations Coordinator): "We always do it in the beginning of the season, if not right off the hop, which I do think is necessary". Likewise, A1 explained: "The earlier the better. Just before the season starts to wear on everybody and people actually start dealing with mental health issues. Towards the end of the season is too late." Interestingly, one participant felt that it would also be important to have a refresher later on in the season because at the start they may not have experienced a great deal of adversity. "I think once you get midseason, that's probably the best time because a lot of these younger kids are coming in. If they're going to struggle, that's probably around the time that they would be feeling that struggle, right?" (S4, Coach).

In sum, the following quote from a team president and managing partner further exemplifies the perceived value and importance of the program:

> The program is one of the finest that I have experienced in regard to assisting and educating us on the signs of a friend or teammate that might need help. I highly

> recommend the program for all athletes of all age groups. Very professionally done and the players enjoy the process of learning about this subject as all of us are so closely involved in mental illness in one way or another. Either us ourselves, or a friend, or loved one will be in need of mental health support at some time in their lives. This program helps remove the stigma associated with the subject of mental health. (S15)

Acquisition and application of knowledge

Acquisition of knowledge

Collectively, the quantitative and qualitative findings suggested that participants felt participation in the program helped them acquire knowledge on mental health. Specifically, 85.11% of athletes and 87.27% of staff ($\chi 2$ [2, N = 102] = 0.373, p = .542) indicated that they learned "a medium amount" to "a lot" after participating in the program (see Figure 2a). More specifically, within this overarching theme the qualitative findings were split into three subthemes that indicated that the participants reported learning how to (1) identify, (2) approach, and (3) support someone who might be experiencing mental health issues. First, when asked about what they learned during the interviews, the participants discussed learning how to identify the signs that someone might be struggling with mental health issues. For instance, A3 described how: "It's easy to put a mask on and show up at the rink. If one of my teammates is struggling internally, the signs aren't always easy to notice, but there's a few signs that they had laid out for us." Following that, participants reported learning that it's important to approach and check in on someone who has shown possible signs of struggle. Accordingly, A2 explained that:

> A couple of years ago someone would be like "Ah maybe he's just having a bad day or something", you know what I mean? But I learned that you should go up and talk to him

and see if he's okay. He might be like that every day, but you just kinda see it that day. Just go up to talk to him. It's not gonna hurt you to do that.

Third, participants described feeling that they learned how to provide support, which included effective communication, getting help, and/or providing them with resources to get proper support. For instance, A1 expressed: "The [program] helped with how to communicate with someone who's dealing with mental health issues." Furthermore, A6 noted: "If you have somebody that you're close with or somebody that you know that is experiencing that kind of thing – [I learned] the steps to take to help them or what to do if you're being that support system." Indeed, during the program, there appeared to be a strong emphasis on ensuring that participants are well-informed of the resources at their disposal. According to S5 (General Manager): "The program gives them another resource of somebody to talk to. Our mental health coach provided by CMHA is a resource they can go speak to if they have any concerns and need to get past those struggles."

Interestingly there was a small minority of athletes (15%) and staff (13%) who indicated that they learned a "small amount to nothing" after attending the program. To further understand this finding, the information acquired during the qualitative interviews suggest that it is possible that certain individuals with prior experiences with mental health had previously learned the information provided in the program. Supporting this contention, A6 added:

I had friends and family kind of struggle with depression and anxiety and those types of mental health issues and I kind of know certain things that they struggle with. So yeah, I've had my fair share of experience with people surrounding me who have suffered from depression.

Application of knowledge

The findings also suggest that participating in the program changed how participants responded to individuals with mental health issues. Although both groups indicated changes in behaviour, staff reported a higher likelihood of changing their response in comparison to athletes, χ^2 (2, N = 102) = 5.389, p = .068. Specifically, 87% of staff in comparison to 68% of athletes indicated they are "likely" or "very likely" to have changed the way they behave. In fact, only 2% of staff and 6% of athletes indicated that their behaviours changed "not at all" or "somewhat likely" (see Figure 2b).

In the qualitative interviews, many participants described having a greater aptitude for providing emotional support following the program. For instance, two hockey players noted:

> [The program] helped me when I've had to help someone who's going through a tough time or when I was going through a tough time. All the self-talk that they teach you to try and help you when you're down and things like that have definitely helped. (A1)

In fact, two staff members even described providing support for individuals with suicidal thoughts. For instance:

> Within 6–8 months of taking the program, I had a close friend express suicidal thoughts to me, and I felt extremely well prepared to respond to the situation because of that. He is in the process of getting the help that he needs. (S11, Management)

As another example, a General Manager (S5) added:

> We've been told one of our athletes probably saved a young girl's life because of the training. He went to school and he saw stuff that was written on the table or on the desk and he called the teacher over and said "Who was sitting here? I think she's in trouble"! and he showed the teacher what had been written on the desk. And they went and found her. Because of his reaction, he quite possibly saved her life.

Stigma

A 2 × 2 mixed factorial ANOVA was conducted to assess athlete and staff perceptions of self-stigma and public stigma, $F(1, 100) = 229.452$, $p = .000$, $\eta^2 = .696$. The analysis revealed there was no main effect between athlete and staff, $F(1, 100) = 2.323$, $p = .131$, $\eta^2 = 0.23$. Accordingly, staff ($M = 3.71$) and athletes ($M = 3.43$) reported comparable perceptions of stigma. Next, there was a main effect between self-stigma and public stigma. Specifically, staff and athletes reported perceiving higher levels of public stigma ($M = 4.64$) compared to personal beliefs about stigma ($M = 2.49$). Lastly, the analysis revealed a small interaction effect $F(1, 100) = 4.241$, $p = .042$, $\eta^2 = 0.41$, where staff ($M = 2.49$) and athletes ($M = 2.50$) demonstrated equally low levels of self-stigma, staff had slightly greater negative perceptions of public stigma ($M = 4.93$) compared to athletes ($M = 4.35$). Figure 3 provides athlete and staff perceptions of self-stigma and public stigma across all items of the SSMIS-SF. Furthermore, program satisfaction was significantly negatively correlated with self-stigma towards mental health ($r = -.404$, $p = .002$). That is, participants who were more satisfied with the program also reported feeling less stigma towards individuals with mental illness. In sum, although the participants' perceptions of the public's beliefs about mental health stigma was high, the quantitative findings demonstrated that participants who were a part of the program reported low levels of personal beliefs towards mental health stigma.

These findings were qualitatively substantiated, where participants directly expressed the importance of the program in relation to stigma, by stating: “This program is very important to eradicate the stigma behind mental health” (S14, Trainer). Specifically, learning about mental health helped the participants feel that it was alright to struggle with mental health. For instance, according to A5: “Mental illness struggles are not a bad thing you shouldn’t be embarrassed by it. Anyone can have it. You shouldn’t be afraid to talk. I think that’s the big thing I took from it.” In fact, some participants went as far as to say that the program may have played a role in decreasing stigma towards mental health. For instance, according to A1:

> It has definitely weakened the stigma, for sure. It used to be like “You’re an outlier” if anyone noticed that you’re feeling that way. Now, there’s so many different outlets that you can tap into if you need help and it’s more accepted now among hockey people.

Discussion

The purpose of this study was to evaluate the effectiveness of a mental health and suicide-awareness program that was delivered to elite adolescent male hockey players and their support staff. The results were presented according to Kirkpatrick’s four-phase program evaluation model (Kirkpatrick & Kirkpatrick, 2016), which included assessing the acceptability of the program (i.e., reaction), examining the acquisition and application of knowledge related to the program (i.e., learning, behaviour), and examining the participants’ perceptions of stigma following the program (i.e., results). Overall, the participants who participated in the mental health awareness program developed by CHMA Ontario reported high levels of program acceptability, acquisition of knowledge related to mental health, perceived changes in how they responded to individuals with mental health issues, and low levels of self-stigma.

Acceptability

The quantitative results of the current study indicated that athletes and staff reported high levels of satisfaction and engagement with the program, while the qualitative findings revealed aspects contributing to these levels of acceptability (e.g., facilitators, content, delivery). Findings were somewhat surprising given that male adolescents typically hold high stigmatising attitudes towards mental illness (Castadelli-Maia et al., 2019; Poucher et al., 2021). Particularly in the context of elite junior hockey in North America, negative perceptions towards mental health difficulties may be partly reinforced by the athletes' fear of the negative career ramifications associated with disclosing mental health concerns (Bauman, 2016). For example, players may fear the loss of playing time, scorn from teammates, coaches, family, and fans, and ultimately being passed over for professional hockey playing opportunities in the National Hockey League (Bauman, 2016; Todd & Edwards, 2021). Furthermore, players are exposed to values that serve to reinforce qualities (e.g., competition, aggression, toughness) that are often associated with traditional conceptualizations of masculinity (Doherty et al., 2016; Steinfeldt & Steinfeldt, 2012). In turn, these masculine norms (e.g., strength, winning, violence, dominations) can have negative consequences on players' willingness to disclose mental health concerns given that they can be interpreted as vulnerabilities and/or weaknesses (Doherty et al., 2016; Steinfeldt & Steinfeldt, 2012). Therefore, participant receptivity to participating in this type of program is important given their vulnerability for experiencing psychological distress due to the pressures and expectations of the sport and its culture (Gouttebarge et al., 2019; Nixdorf et al., 2016). Participants' willingness to engage with this type of program may also be influenced by the increasing number of high-profile athletes and role models speaking about their own mental health issues (Poucher et al., 2021; Swann et al., 2018), something that is promising for the future development and implementation of programs among such groups. A contributing factor

to the high levels of acceptability among athletes and staff may be attributed to structural components of the program that included having access to a trained mental health coach in addition to integrating a respected member of the community who was identified as a mental health support person over the course of the season. Having multiple individuals who were involved with the teams and who had different roles in terms of promoting mental health likely contributed to reinforcing the importance that the sport organisations placed on supporting athlete mental health, something which also may have contributed to their levels of acceptability. Additionally, previous research has identified the need to develop and implement accessible and qualified support networks in the sport environment (Lebrun et al., 2020), partially to facilitate the early detection of psychological distress (Gouttebarge et al., 2019). Consequently, our results suggest that sport organisations may want to consider integrating different specialists, integral to the community, that can operate as an interdisciplinary team to create a resourceful and supportive environment in order to prevent mental illness among athletes.

Acquisition of knowledge

While quantitative findings demonstrated that athletes and staff in the current study acquired knowledge on mental health following program participation, qualitative findings revealed that the main takeaways included how to identify, approach, and support someone who may be experiencing mental health issues. Similarly, after participating in an educational program, adolescents have been shown to learn significant amounts of knowledge on topics related to mental health (e.g., manifestations of stress, stress management, coping mechanisms; Shapiro et al., 2016; Wei et al., 2013). Specific to male adolescent athletes, Swann et al. (2018) found they had a need and desire to recognise mental health issues, help someone with a mental health problem, and manage adversity. Moreover, other programs delivered to athletes have also

demonstrated improvements in knowledge related to the recognition of signs and symptoms of disorders (e.g., depression, anxiety) and use of treatments (Breslin et al., 2017; Liddle et al., 2021). Although knowledge of mental health and suicide is important for adolescent athletes, it is also relevant for other members of the hockey support staff to have this knowledge, including coaches, who have been previously identified as an important person for athletes who are experiencing psychological distress (Sebbens et al., 2016; Swann et al., 2018). However, coaches have previously reported feeling a reluctance to intervene with athletes experiencing mental health difficulties due to a lack of understanding and a fear of the consequences associated with providing inaccurate information (Lebrun et al., 2020). Therefore, our results provide one of the first accounts of how a mental health awareness program helped staff become receptive to delivering this type of support to individuals who are experiencing mental health issues. As a result, coaches and support staff can become key advocates in creating an environment that is supportive of individuals experiencing psychological distress and/or mental illnesses.

Application of knowledge

The mixed-methods findings suggested that the program may have enacted change in how participants responded to individuals with mental health issues. Specifically, the quantitative findings indicated that participants reported intentions to change their behaviours. Although previous findings in the context of sport have also reported that programs have the potential to influence changes in intentions to provide or seek help following program attendance (Breslin et al., 2017; Liddle et al., 2021), authors advocated for more research to determine how these extend to actual changes in helping individuals at risk (Liddle et al., 2021; Vella et al., 2021). Perhaps qualitative findings of the current study provide insight into this gap given that participants felt better equipped to support someone experiencing mental health problems or

suicidal thoughts and described instances in which they recognised the signs and symptoms of psychological distress and helped the individual get the appropriate resources. This successful application of knowledge may have been facilitated by the use of interactive activities where participants reported learning how to put into practice what they learned from the program by role playing specific scenarios that were designed to promote behaviour change (cf. Michie & Prestwich, 2010). Given that the most effective methods for delivering mental health awareness programs in sport are less well understood (Breslin et al., 2017), future research could explore how the inclusion of behavioural change techniques in the delivery of the program can contribute to improving participants' help seeking or help providing behaviours in the long term.

Program outcomes

In the current study, on the standardised measures of stigma, participants reported low levels of personal stigma following completion of the program and those who were more satisfied with the program also reported lower levels of stigma. Without a baseline measurement of personal stigma, it is impossible to determine if there was change in personal stigma associated with program participation. Nevertheless, it is encouraging that the participants reported low personal stigma following the completion of the program as it clearly suggests that upon program completion they are not personally endorsing stigmatising views about mental illness, which is the goal of the program. However, it is particularly interesting that although the participants reported low levels of personal stigma they reported significantly higher levels of public stigma, indicating that they continue to acknowledge the extent to which others hold stigmatising views. It is important to note that these responses are evaluating others' views in general, not their team's views per se. Therefore, the higher levels of perceived public stigma is likely an accurate reflection of their experience in the wider sport community which promotes

resilience, toughness, and a win-at-all-cost mentality, which might indirectly label athletes with mental health problems and illnesses as weak, fragile, or inadequate (Bauman, 2016; Rao & Hong, 2020). Notably, the qualitative responses allowed the participants to share how the program contributed to less public stigma with their team via an increased acceptance and support of those with mental health difficulties. Thus, in future evaluations of mental health awareness programs a more team-focused measurement of perceptions of public stigma would be helpful in determining the impact of the program on the team's public stigma, given that public stigma (not personal) is the main barrier for athletes to seek support (Rao & Hong, 2020).

Limitations and future directions

A number of limitations must be considered. First, the current study used a cross-sectional research design (i.e., one time-point; post-season), which is a result of the community partners approaching the researchers immediately before delivery of the program, making it impossible to obtain ethics in time to obtain baseline data. When possible, researchers contend that longitudinal designs with at least three time points are optimal to detect change (Nesselroade & Molenaar, 2010). Therefore, in order to demonstrate the effectiveness of mental health programs in elite adolescent athletes, future studies should consider the use of multiple time points throughout the program development, implementation, and post-program, in order to be consistent with best practices (cf. Yarbrough et al., 2011). Second, the central outcome examined in this study was stigma, however research in other contexts have shown that mental health programs can contribute to other important outcomes, such as mental health literacy, response self-efficacy, and help seeking behaviours (Breslin et al., 2017; Chow et al., 2021; Liddle et al., 2021). Future studies should consider examining the impact of a mental health awareness and prevention program in elite male adolescent athletes using a wider range of program outcomes.

Third, this study looked at the specific demographic of elite male adolescent hockey players, therefore future research should examine other sports, contexts, genders, and age groups.

Conclusion

The context of elite junior hockey in North America is filled with high amounts of competitive stress and angst for the young athlete participants (Nixdorf et al., 2016; Todd & Edwards, 2021). In turn, these male athletes may fear the negative career ramifications that would be associated with disclosing mental health concerns, thus reinforcing high stigmatising attitudes related to mental health problems among this population (Bauman, 2016). Given that this group typically holds negative attitudes towards mental illness (Poucher et al., 2021), the current results showing the hockey players' receptivity to this program are promising for the future development and implementation of programs among groups with similar or higher levels of stigma. In addition, the clear benefits of the program in participants' increased knowledge of mental health difficulties, appropriate help-seeking and available resources as well as better peer/athlete support all support the worth of similar programs with young athletes.

Notes

1. More information about safeTALK can be found at: https://www.livingworks.net/safetalk
2. The full interview guide is provided online as a supplemental document.

Data sharing policy: De-identified data will be shared with other researchers upon request.

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References

Bauman, N. J. (2016). The stigma of mental health in athletes: Are mental toughness and mental health seen as contradictory in elite sport? *British Journal of Sports Medicine, 50*(3), 135–136. https://doi.org/10.1136/bjsports-2015-095570

Bloom, G. A., Dohme, L.-C., & Falcão, W. R. (2020). Coaching youth athletes. In R. Resende, & A. R. Gomes (Eds.), *Coaching for human development and performance in sports* (pp. 143–167). Springer.

Braun, V., Clarke, B., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191–205). Routledge.

Braun, V., Clarke, V., Terry, G., & Hayfield, N. (2018). Thematic analysis. In P. Liamputtong (Ed.), *Handbook of research methods in health and social sciences* (pp. 843–860). Springer.

Breslin, G., Shannon, S., Haughey, T., Donnelly, P., & Leavey, G. (2017). A systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches and officials. *Systematic Reviews, 6*(1), 177. https://doi.org/10.1186/s13643-017-0568-6

Burke, S. (2016). Rethinking 'validity' and 'trustworthiness' in qualitative inquiry: How might we judge the quality of qualitative research in sport and exercise sciences? In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 352–362). Routledge.

Carsley, D., Mettler, J., Shapiro, A. J., Mills, D. J., Bloom, E. L., & Heath, N. L. (2018). Evaluation of an educator-delivered school-based stress management program for

adolescents. *LEARNing Landscapes, 10*(2), 73–89. https://doi.org/10.36510/learnland.v10i2.802

Castadelli-Maia, J. M., Gallinaro, J. G., Falcão, R. S., Gouttebarge, V., Hitchcock, M. E., Hainline, B., Reardon, C. L., & Stull, T. (2019). Mental health symptoms and disorders in elite athletes: A systemic review of cultural influencers and barriers to athletes seeking treatment. *British Journal of Sports Medicine, 53*(11), 707–721. https://doi.org/10.1136/bjsports-2019-100710

Chow, G. M., Bird, M. D., Gabana, N. T., Cooper, B. T., & Becker, M. A. S. (2021). A program to reduce stigma toward mental illness and promote mental health literacy and help-seeking in National Collegiate Athletic Association Division I student-athletes. *Journal of Clinical Sport Psychology, 15*(3), 185–205. https://doi.org/10.1123/jcsp.2019-0104

Corrigan, P. W., Michaels, P. J., Vega, E., Gause, M., Watson, A. C., & Rüsch, N. (2012). Self-stigma of mental illness scale—short form: Reliability and validity. *Psychiatry Research, 199*(1), 65–69. https://doi.org/10.1016/j.psychres.2012.04.009

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. Sage.

Danermark, B., Ekström, M., & Karlsson, J. C. (2019). *Explaining society: Critical realism in the social sciences*. Routledge.

Doherty, S., Hannigan, B., & Campbell, M. J. (2016). The experience of depression during the careers of elite male athletes. *Frontiers in Psychology*, *7*, 1069. https://doi.org/10.3389/fpsyg.2016.01069

Duffy, J., Rooney, B., & Matthews, J. (2021). Coaches' mental health literacy and role perceptions for supporting young people's mental health. *Journal of Applied Sport Psychology, 33*(1), 45–59. https://doi.org/10.1080/10413200.2019.1646840

Fraser-Thomas, J., & Côté, J. (2009). Understanding adolescents' positive and negative developmental experiences in sport. *The Sport Psychologist, 23*(1), 3–23. https://doi.org/10.1123/tsp.23.1.3

Gouttebarge, V., Castaldelli-Maia, J. M., Gorczynski, P., Hainline, B., Hitchcock, M. E., Kerkhoffs, G. M., Rice, S. M., & Reardon, C. L. (2019). Occurrence of mental health symptoms and disorders in current and former elite athletes: A systematic review and meta-analysis. *British Journal of Sports Medicine, 53*(11), 700–706. https://doi.org/10.1136/bjsports-2019-100671

Gulliver, A., Griffiths, K. M., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: A qualitative study. *BioMed Central Psychiatry, 12*(1), 157. https:// doi.org/10.1186/1471-244X-12-157

Hammond, T., Gialloreto, C., Kubas, H., & Davis, H. (2013). The prevalence of failure-based depression among elite athletes. *Clinical Journal of Sport Medicine, 23*(4), 273–277. https://doi.org/10.1097/ JSM.0b013e318287b870

Hart, L. M., Mason, R. J., Kelly, C. M., Cvetkovski, S., & Jorm, A. F. (2016). 'Teen mental health first aid': A description of the program and an initial evaluation. International *Journal of Mental Health Systems, 10*(1), 3. https://doi.org/10.1186/s13033-016-0034-1

Henriksen, K., Schinke, R., McCann, S., Durand-Bush, N., Moesch, K., Parham, W. D., Larsen, C. H., Cogan, K., Donaldson, A., Poczwardowski, A., Noce, F., & Hunziker, J. (2020). Athlete mental health in the Olympic/paralympic quadrennium: A multi-societal

consensus statement. *International Journal of Sport and Exercise Psychology, 18*(3), 391–408. https://doi.org/10.1080/1612197X.2020.1746379

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior, 43*(2), 207–222. https://doi.org/10.2307/3090197

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Association for Talent Development.

Lebrun, F., Macnamara, À, Collins, D., & Rodgers, S. (2020). Supporting young elite athletes with mental health issues: Coaches' experience and their perceived role. *The Sport Psychologist, 34*(1), 43–53. https://doi.org/10.1123/tsp.2019-0081

Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA publications and communications board task force report. *American Psychologist, 73*(1), 26–46. https://doi.org/10.1037/amp0000151

Liddle, S. K., Deane, F. P., Batterham, M., & Vella, S. A. (2021). A brief sports-based mental health literacy program for male adolescents: A cluster-randomized controlled trial. *Journal of Applied Sport Psychology, 33*(1), 20–44. https://doi.org/10.1080/10413200.2019.1653404

Mallett, C. J., & Lara-Bercial, S. (2016). Serial winning coaches: People, vision, and environment. In M. Raab, P. Wylleman, R. Seiler, A.-M. Elbe, & A. Hatzigeorgiadis (Eds.), *Sport and exercise psychology research* (pp. 289–322). Academic Press.

Mental Health Commission of Canada. (2013). *Making the case for investing in mental health in Canada.* https://www.mentalhealthcommission.ca/sites/default/"les/2016-06/Investing_in_ Mental_Health_FINAL_Version_ENG.pdf

Michie, S., & Prestwich, A. (2010). Are interventions theory-based? Development of a theory coding scheme. *Health Psychology, 29*(1), 1–8. https://doi.org/10.1037/a0016939

National Institute of Mental Health. (2017). *Mental illness.* https://www.nimh.nih.gov/health/statistics/mentalillness.shtml

Nesselroade, J. R., & Molenaar, P. C. M. (2010). Emphasizing intraindividual variability in the study of developmental over the life span. In W. F. Overton (Ed.), *The handbook of life-span development* (pp. 30–54). Wiley.

Nixdorf, I., Frank, R., & Beckmann, J. (2016). Comparison of athletes' proneness to depressive symptoms in individual and team sports: Research on psychological mediators in junior elite athletes. *Frontiers in Psychology, 7*, 893. https://doi.org/10.3389/fpsyg.2016.00893

Ontario Hockey League. (2021). CMHA talk today program. https://ontariohockeyleague.com/talktoday

Poucher, Z. A., Tamminen, K. A., Kerr, G., & Cairney, J. (2021). A commentary on mental health research in elite sport. *Journal of Applied Sport Psychology, 33*(1), 60–82. https://doi.org/10.1080/10413200.2019.1668496

Rao, A. L., Asif, I. M., Drezner, J. A., Toresdahl, B. G., & Harmon, K. G. (2015). Suicide in National Collegiate Athletic Association (NCAA) athletes: A 9-year analysis of the NCAA resolutions database. *Sports Health: A Multidisciplinary Approach, 7*(5), 452–457. https://doi.org/10.1177/1941738115587675

Rao, A. L., & Hong, E. (2020). Overcoming the stigma of mental health in sport. In A. L. Rao, & E. Hong (Eds.), *Mental health in the athlete: Modern perspectives and novel challenges for the sports medicine provide* (pp. 1–10). Springer.

Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The mental health of elite athletes: A narrative systematic review. *Sports Medicine, 46*(9), 1333–1353. https://doi.org/10.1007/s40279-016-0492-2

Sandelowski, M. (2010). What's in the name? Qualitative description revisited. *Research in Nursing & Health, 33*(1), 77–84. https://doi.org/10.1002/nur.20362

Schinke, R. J., Stambulova, N. B., Si, G., & Moore, Z. (2018). International society of sport psychology position stand: Athletes' mental health, performance, and development. *International Journal of Sport and Exercise Psychology, 16*(6), 622–639. https://doi.org/10.1080/1612197X.2017.1295557

Sebbens, J., Hassmén, P., Crisp, D., & Wensley, K. (2016). Mental health in sport (MHS): Improving the early intervention knowledge and confidence of elite sport staff. *Frontiers in Psychology, 7*, 911. https://doi.org/10.3389/fpsyg.2016.00911

Shapiro, A. J., Heath, N. L., & Carsley, D. (2016). Pilot evaluation of the feasibility and acceptability of StressOFF strategies: A single-session school-based stress management program for adolescents. *Advances in School Mental Health Promotion, 9*(1), 12–28. https://doi.org/10.1080/1754730X.2015.1110494

Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology, 11*(1), 101–121. https://doi.org/10.1080/1750984X.2017.1317357

Sparkes, A. C. (2015). Developing mixed methods research in sport and exercise psychology: Critical reflections on five points of controversy. *Psychology of Sport and Exercise, 16,* 49–59. https://doi. org/10.1016/j.psychsport.2014.08.014

Sparkes, A. C., & Smith, B. (2009). Judging the quality of qualitative inquiry: Criteriology and relativism in action. *Psychology of Sport and Exercise, 10*(5), 491–497. https://doi.org/10.1016/j. psychsport.2009.02.006

Steinfeldt, M., & Steinfeldt, J. A. (2012). Athletic identity and conformity to masculine norms among college football players. *Journal of Applied Sport Psychology, 24*(2), 115–128. https://doi.org/10.1080/10413200.2011.603405

Sullivan, P., Blacker, M., Murphy, J., & Cairney, J. (2019). Levels of psychological distress of Canadian university student-athletes. *Canadian Journal of Higher Education, 49*(1), 47–59. https://doi.org/10.7202/1060823ar

Sullivan, P., Murphy, J., & Blacker, M. (2019). The level of mental health literacy among athletic staff in intercollegiate sport. *Journal of Clinical Sport Psychology, 13*(3), 440–450. https://doi.org/10.1123/ jcsp.2018-0052

Swann, C., Telenta, J., Draper, G., Liddle, S., Fogarty, A., Hurley, D., & Vella, S. (2018). Youth sport as a context for supporting mental health: Adolescent male perspectives. *Psychology of Sport and Exercise, 35,* 55–64. https://doi.org/10.1016/j.psychsport.2017.11.008

Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Allyn and Bacon.

Todd, J., & Edwards, J. R. (2021). Understanding parental support in elite sport: A phenomenological approach to exploring midget triple a hockey in the Canadian

maritimes. *Sport in Society*, *24*(9), 1590–1608. https://doi.org/10.1080/17430437.2020.1763311

Urquhart, D. A., Bloom, G. A., & Loughead, T. M. (2020). The development, articulation, and implementation of a coaching vision of multiple championship-winning university ice hockey coaches. *International Sport Coaching Journal*, *7*(3), 335–346. https://doi.org/10.1123/iscj.2019-0096

Vella, S. A., Swann, C., & Tamminen, K. A. (2021). Reflections on the field of mental health in sport: Critical issues and ways of moving forward. *Journal of Applied Sport Psychology*, *33*(1), 123–129. https://doi.org/10.1080/10413200.2020.1854898

Wei, Y., Hayden, J. A., Kutcher, S., Zygmunt, A., & McGrath, P. (2013). The effectiveness of school mental health literacy programs to address knowledge, attitudes and help seeking among youth. *Early Intervention in Psychiatry*, *7*(2), 109–121. https://doi.org/10.1111/eip.12010

World Health Organization. (2018). *Mental health: Strengthening our response.* https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response

Wynters, R., Liddle, S. K., Swann, C., Schweickle, M. J., & Vella, S. A. (2021). Qualitative evaluation of a sports-based mental health literacy program for adolescent males. *Psychology of Sport and Exercise*, *56*, 101989. https://doi.org/10.1016/j.psychsport.2021.101989

Yarbrough, D. B., Shulha, L. M., Hopson, R. K., & Caruthers, F. A. (2011). *The program evaluation standards: A guide for evaluators and evaluation users.* Sage.

Table 1

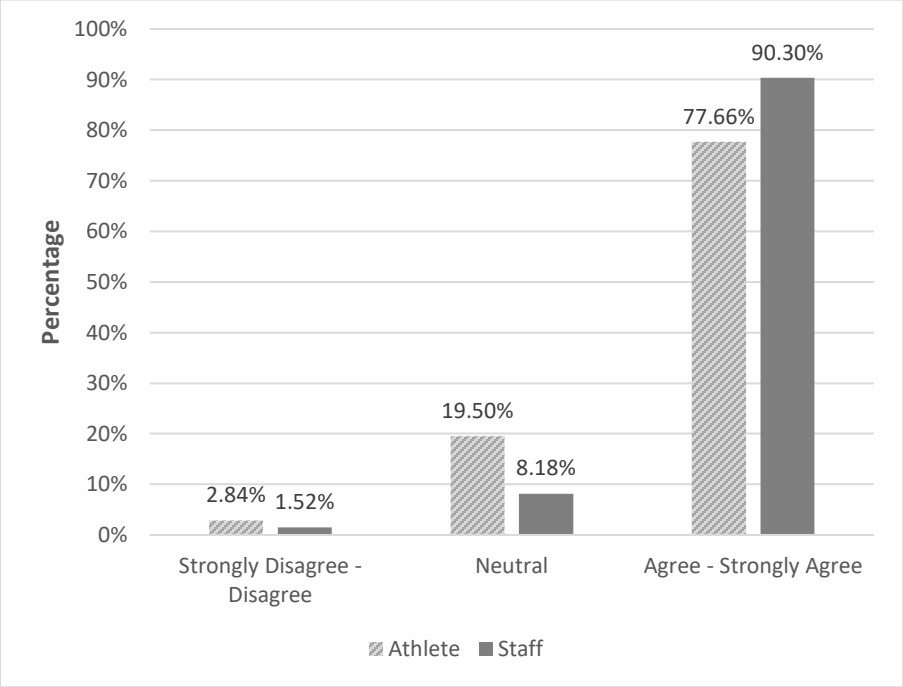
Participants' perceptions of acceptability of the program

The program….	Low Acceptability	Neutral Acceptability	High Acceptability
Was relevant and met expectations	2.94%	14.71%	82.35%
Was informative and understandable	0.98%	7.84%	91.18%
Gave strategies and techniques	3.92%	9.80%	86.27%
Was valuable for personal development	2.94%	14.71%	82.35%
Is something I would recommend	1.96%	14.71%	83.33%
Should be mandatory	0.00%	18.63%	81.37%
Total	**2.12%**	**13.40%**	**84.48%**

Note: Low acceptability represents "strongly disagree" to "disagree" program satisfaction scores. Neutral acceptability represents "neutral" program satisfaction scores. High acceptability represents "agree" to "strongly agree" program satisfaction scores.

Figure 1

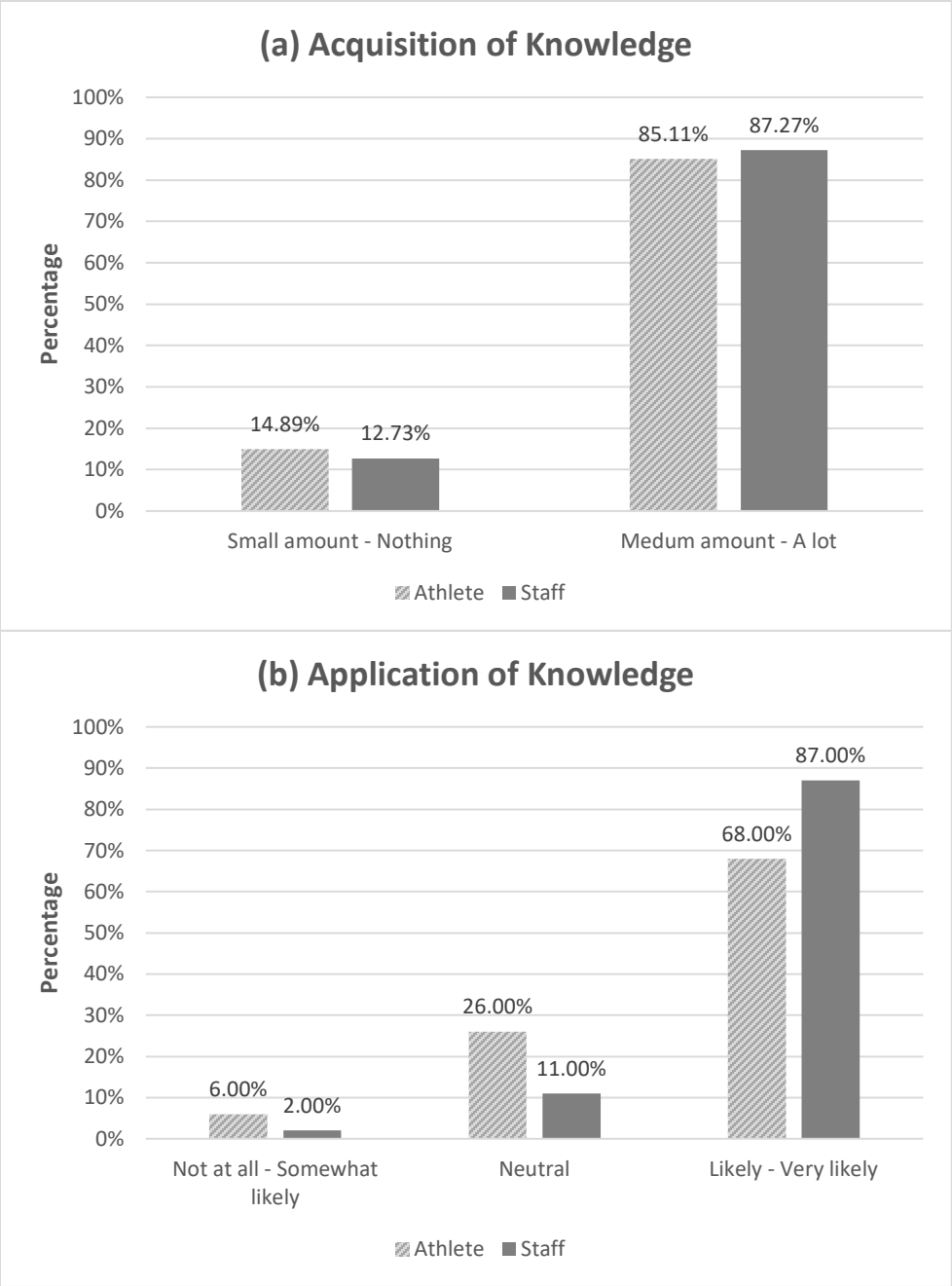
Program Acceptability



Note: Athlete and staff perceptions of program acceptability (%) aggregated across 6 items of program satisfaction.

Figure 2

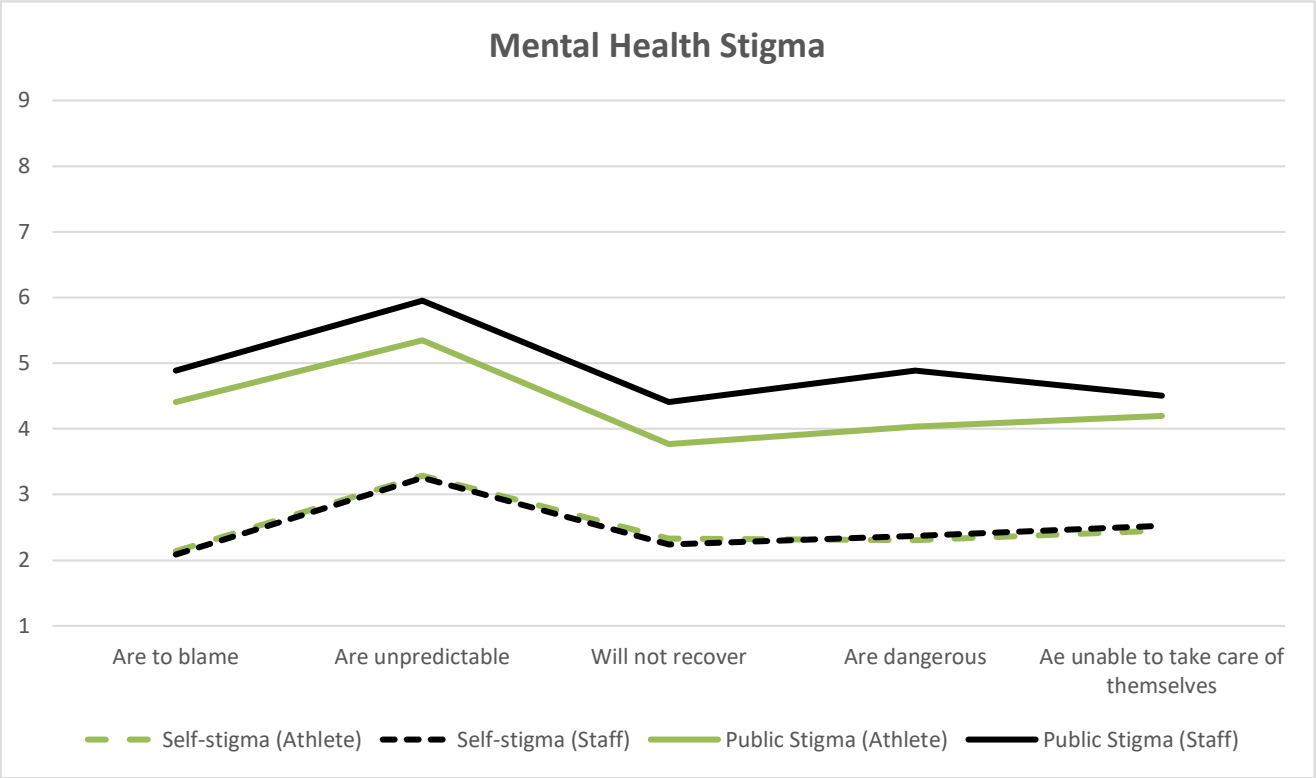
Acquisition and Application of Knowledge



Note: Athlete and staff perceptions of (a) acquisition of knowledge and (b) application of knowledge.

Figure 3

Stigma Towards Mental Illness



Note: This figure depicts athlete and staff perceptions of self-stigma and public stigma across individual items of the SSMIS-SF.