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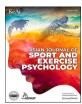
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# The design of a career transition psychological support program for retired Olympic athletes in Japan

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# ABSTRACT

The purpose of this study was to examine the feasibility of an intervention program focused on career transition psychological support for retired Olympic athletes in Japan. It was expected that the intervention program would significantly enhance knowledge about career transition support for athletes and also enhance attitudes towards seeking career transition support. 24 retired Japanese female athletes who had competed in the Olympics between 1996 and 2016 participated in the study. The content of the support program was delivered in a three-part workshop, focusing on career transitions in sport, post-retirement psychological adjustment difficulties, and coping strategies. Pre-workshop and post-workshop assessment were conducted. Career transition support knowledge for athletes and attitudes about seeking career transition support significantly increased. The current results suggest that increasing knowledge helps retired and retiring athletes seek professional help. Practical applications and future research recommendations are provided.

# Introduction

One of the only inevitabilities in sport is that elite athletes will eventually retire from their sport. Retirement from elite level sport, often referred to as the transition out of sport, is the process of ending a highly competitive sporting career as an elite athlete and making a transition into the world of work (Park et al., 2013). In this retirement process, various research has indicated that athletes need to adjust to numerous psychological, social, and vocational changes (Cecić Erpič et al., 2004; Stambulova et al., 2007). Park et al. (2013) conducted a systematic review of retirement from sport that included 126 studies published between 1968 and 2010 and found that 1768 (16 %) of the 13, 511 athletes studies reported that their career transition experiences had involved psychological adjustment difficulties.

Lavallee et al. (2014) developed a conceptual model of psychological adjustment to retirement from sport based on the underpinning extant literature. In the model (Fig. 1), the quality of adjustment to athletic retirement is influenced by three factors as follows: the cause of athletic retirement, with a focus on voluntary and involuntary reasons for retirement; coping resources that affect the responses to retirement, including social support; and developmental experiences related to the adaptation process, including identity-related issues. The model also

indicates potential consequences of athletes' retirement (career transition distress or healthy career transition) and suggests providing interventions if athletes require psychological support. The model can assist in the development of effective support programs because once specific retirement difficulties are demonstrated, appropriate psychological support can be put in place at the organizational level (Lavallee et al., 2014). At the present time, however, there has been very little research conducted on the design of intervention programs to provide career transition support retiring athletes.

The extant research points to a significant role that career transition support can play in addressing career transition adjustment difficulties (Cohen, 2004). Studies have demonstrated that the type of social support perceived and received by athletes is linked to the quality of adjustment to retirement (Park et al., 2013). Athletes who received tangible support to develop their career within a formal support program from national sporting organizations experienced fewer difficulties following retirement than athletes who did not receive support (Leung et al., 2005). However, Brown and Potrac (2009) found that athletes who struggled with their career transition reported a lack of organizational support. Other researchers (Breslin et al., 2018; Bu et al., 2020) have also highlighted the importance of increasing their knowledge related to their support needs can assist athletes in seeking professional

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help.

There are two major perspectives associated with career transition support for athletes: pre-retirement preventive; and coping with negative consequences (Stambulova & Wylleman, 2014). The preventive perspective approach is aimed at helping athletes to prepare themselves for the forthcoming transition demands. The approach associated with coping with negative consequences focuses on assisting athletes to analyze traumatic situations and identify ways of coping. Career transition support is often structured into programs, organized by an institution, and can involve: workshops, seminars, educational modules, individual counseling and/or a referral network providing individualized and/or group-oriented support services to athletes with regard to their post-sporting career (Wylleman et al., 2004). For example, sports organizations such as national Olympic committees (NOCs) have developed career transition support programs for Olympic and Paralympic athletes.

Stambulova and Ryba (2013) have provided a review of career transiton support programs for elite athletes across 19 countries. The authors concluded that career support is highly contextualized and culturally-informed, even though some commonalities in the content of programs in different countries exists. The importance of evidence-based local practices and programs based on the needs of athletes was also highlighted. At the present time, however, there has been very little research conducted on evaluating career transition support intervention programs for retiring and retired athletes.

In Japan, several studies have been conducted on the retirement experiences of elite athletes. Toyoda and Nakagomi (1996) found that Japanese athletes faced some psychological difficulties following athletic retirement, including identity-related issues. Nakagomi (2012) highlighted the risks associated with a strong and exclusive athletic identity for retiring Japanese athletes. In terms of career transition support, the Japanese Olympic Committee (JOC) started developing a career program for Olympic athletes in 2002. Hong and Coffee (2018) reviewed the contents of career programs across the world a found that: the JOC is responsible for delivering a JOC Career Academy (JCA) program; JCA runs its own program distinct from the IOC Athletes Career Program; JCA offers tailored support services depending on athletes' needs; and JCA does not have specific practitioners who have knowledge of athletic career transition for the program. Further research on support programs for retired athletes in Japan is, therefore, warranted.

The purpose of this research is to conduct a feasibility study of an

intervention program focused on career transition psychological support for retired Olympic athletes in Japan. The intervention was developed through a three-step system engineering method (Walden et al., 2015): employed to solve a recognized problem by: identifying stakeholder needs (step 1); defining the requirements according to the stakeholder needs (step 2); and designing and evaluating the intervention program (step 3). In the present research, a system does not refer to an information system for processing data using a computer, but rather a combination of interacting elements organized to achieve one or more stated purposes (Walden et al., 2015). Oulevey (Oulevey, 2021) has recently employed a system engineering method to identify the needs of retiring athletes in Japan (i.e., step 1: stakeholder needs) and the system requirements according to their needs to help them make an optimal transition (i.e., step 2). The system requirements include coping with stress, planning for post-sporting career, and decision-making to help control the future, while specific requirements include managing a potential stigma associated with being seen receiving career transition psychological support (Oulevey, 2021). The present study focuses on the design and evaluation of an intervention program (i.e., step 3) to fulfull the needs of the stakeholders (i.e., retired Olympic athletes in Japan) while taking into account the identified requirements. It was expected that the intervention program would significantly enhance knowledge about career transition support for athletes and also enhance attitudes towards seeking career transition support.

#### Material and methods

# **Participants**

The present study included 24 retired Japanese female athletes who had competed in the Olympics between 1996 and 2016 participated in the study. All participants were recruited through snowball sampling (Parker et al., 2019). The age of the participants was: 25–29 years (n = 2); 30–34 years (n = 3); 35–39 years (n = 7); 40–44 years (n = 8); and 45–49 years (n = 4). They competed in the sports of swimming (n = 14) and artistic swimming (n = 10), and last participated in the Olympic Games at Atlanta in 1996 (n = 2), Sydney in 2000 (n = 4), Athens in 2004 (n = 4), Beijing in 2008 (n = 8), London in 2012 (n = 4), and Rio de Janeiro in 2016 (n = 2). Their best result at the Olympics was: Gold medal (n = 1); Silver medal (n = 8); Bronze medal (n = 10); and 4–8th place (n = 5). They retired in: 1995–1999 (n = 1); 2000–2004 (n = 8); 2005–2009 (n = 8); 2010–2014 (n = 3); and 2015–2019 (n = 4).

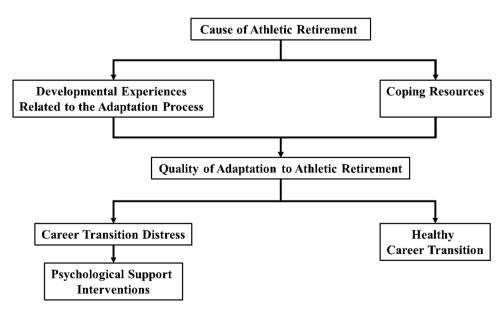


Fig. 1. Conceptual model of psychological adjustment to retirement from sport.

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#### **Procedures**

Permission to conduct this study was received from a University ethics committee. All participants provided written informed consent before participating in the study. A career transition support intervention program was designed and delivered online by the first author (MO) in the form of a self-help workshop lasting 90 min held in October 2021.

#### Career transition support intervention program

To design the career transition support intervention program, the system requirements from the stakeholder's needs of the psychological support was applied (Oulevey, 2021). This approach ensured that the program effectively addressed the unique challenges faced by the retired athletes. The content of the program was delivered in three parts, with each part structured around the conceptual model of psychological adjustment factors (Lavallee et al., 2014). The career transiton support intervention program was designed as an online workshop delivered anonymously, with names and faces of participants not visible during the program.

Part 1 of the program provided an introduction to the overall issue of retirement from sport, with a specific focus on the causes for retirement and how to achieve a balance between a sporting career and non-sporting activities. This part of the program outlined how the lack of control over the reason to retire may cause problems for the athlete due to the loss of structure and decision-making they may have previously experienced as part of their daily routine.

Part 2 focused on the psychological stress that can be experienced post-retirement. An emphasis was placed on the unique challenges encounteed by athletes who retire from sport, including the possible stigma linked to seeking psychological assistance during career transition planning.

Part 3 focused on increasing knowledge of the developmental experiences related to psychological adjustment to retirement from sport, including athletic identity. This part of the program also concentrated on how to effectively utilise coping resources, including social support, that have the potential to impact the response to retirement from sport.

### Assessment

Assessments of knowledge about career transition support for athletes were conducted at two time points (baseline and post-workshop) and designed in line with guidance by Andrade et al. (2020). At each time point, the participants completed an 8-item assessment questionnaire related to knowledge about career transition support for athletes in the following areas: athletic identity; control; coping; decision-making; dual career; planning; stigma; and stress. Scoring for the knowledge items invovled an assessment of either a correct or incorrect (don't know) answer.

Participants were also invited to complete 1–2 questions measuring attitudes towards seeking career transition support (Andrade et al., 2020). The first question was: "Is it easy for you to go to a psychologist for help with your career or life?" and used a 7-point Likert scale anchored by Not Easy (1) and Easy (7). For participants who responded with 1, 2, or 3 in the first question, they were invited to respond to a second question: "Why is it not easy to seek professional help?" with the following three options: Because I think I can solve my career problems on my own; I do not want others to see my weaknesses; and Because I do not know how or what to ask.

Face validation procedures and pilot testing were employed on the assessment questionnaires. The assessment questionnaire ideas were also based on the needs identified by the stakeholders as part of the validation process. With regards to reliability, acceptable measures of internal consistency were determined; *Knowledge about Career Transition Support for Athletes*: baseline (Kuder-Richardson Formula 20;  $KR_{20} = 0.87$ ) and post-workshop ( $KR_{20} = 0.83$ ); and *Attitudes Towards Seeking* 

Career Transition Support: test-retest reliability assessment = 0.71.

## Data analysis

Percentages were calculated for eight knowledge scores across the participants at each time point, while Mean and Standard Deviation scores were calculated for an overall knowledge score and the two attitude questions. Non-parametric paired-samples tests (Wilcoxon signed-rank test and McNemar's test) were conducted, considering the distribution of the data, to examine whether the knowledge of career transition support significantly changed between pre- and post-tests. Parametric paired-samples tests (Paired t-tests) were used to examine changes in attitudes towards seeking help between baseline and post-test. The level of significance was set at P < 0.05 (two-sided). Statistical analysis were conducted using Stata/SE 15.1, StataCorp LLC, College Station, TX, USA.

#### Results

Knowledge about career transition support for athletes

The proportions of correct answers to each question were elevated in the post-test compared with the baseline for all questions as shown in Table 1. The total score across the eight questions were significantly elevated after the workshop had been given, with a mean percentage of 72.42 % (SD = 27.38) in the post-test compared with 31.76 % (SD = 28.63) at baseline. Prior to the workshop, none of the participants had knowledge related to dual career support. Few participants had knowledge related to control, athletic identity, and decision-making. In contrast, the participants understood the importance of planning (45.8%), control (50%), coping (54.2%), and stigma (83.3%).

#### Attitudes towards seeking career transition support

In the response to the question, "Is it easy for you to go to a psychologist for help with your career or life?", the degree of the ease significantly increased from baseline (M=3.33, S.D. = 1.69) to post-test (M=4.38, S.D. = 1.84). This improvement was statistically significant, t (23) = -3.43, p=0.0023.

A total of 17 participants answered Not Easy (response 1, 2, or 3) at baseline in response to the question "Why is it not easy to seek professional help?", whereas eight answered Not Easy (response 1, 2, or 3) post-test. In terms of the specific reasons for perceived difficulties, the responses changes as follows: Because I think I can solve my career problems on my own (baseline = 2; post-test = 0); I do not want others to see my weaknesses (baseline = 2; post-test = 2); and Because I do not know how or what to ask (baseline = 13; post-test = 6).

#### Discussion

The findings of this study advance knowledge pertaining to career transition psychological support for retired athletes. The originality of

 Table 1

 Proportions of correct answers (%) on knowledge about career transiton support for athletes.

Knowledge area	Baseline (%)	Post-test (%)	Statistical Comparison
Stress	4.2	16.7	$\chi^2 = 3.00$
Planning	45.8	87.5	$\chi^2 = 8.33**$
Athletic identity	8.3	95.8	$\chi^2 = 8.00**$
Dual career	0.0	95.8	$\chi^2=23.00***$
Stigma	83.3	87.5	$\chi^2 = 0.20$
Decision-making	8.3	37.5	$\chi^2 = 5.44$ *
Coping	54.2	75	$\chi^2 = 2.27$
Control	50	83.3	$\chi^2 = 6.40$ *

Note. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

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the research was that the intervention was developed through a systems engineering method (Walden et al., 2015), with the features (e.g., online and anonymously) and content derived through a requirement analysis of the needs of retired elite athletes (Oulevey, 2021). The results support the findings of previous studies that increasing knowledge helps athletes seek professional help (Breslin et al., 2018; Bu et al., 2020). The results also support research by Cunningham et al. (2014) that highlighted how self-help interventions might be a first step in encouraging retired athletes to engage with seeking help, especially if delivered online.

The findings of the study advance existing theory, including in relation to career transition support (Cohen, 2004). Specifically, the results highlight the importance of developing a greater perceived availability of career transition support through novel offerings (in this case, on-line self-help support). Many athletes report a lack of organisational support post-retirement (Brown & Potrac, 2009) and often, as a result, have difficulty knowing how to find psychological support associated with career transition adjustment. Retired athletes who are aware of, and access, different types of support are more likely to experience a successful career transition. Collectively, these results add detail to the conceptual model of psychological adjustment to retirement from sport (Lavallee et al., 2014).

The findings also have several practical implications for both current and retired athletes. Both career transition support knowledge and attitudes about seeking career transition support were observed to increase significantly as a result of intervention (in this case, an online workshop focused on career transitions in sport, post-retirement psychological adjustment difficulties, and coping strategies). However, the knowledge areas about career transition support for athletes related to stress and coping did not improve significantly. This could be due to the perceived difficulties highlighted by participants regarding attitudes towards seeking career transition support. This highlights the importance for organisation to facilitate access for individuals to seek professional help association with psychological difficulties both prior to retirement (for current athletes), at the point of retirement (for retiring athletes), and post-retirement (for retired athletes) (Park et al., 2013; Lavallee et al., 2014). It also emphasizes the need for practitioners to design and deliver interventions based on the specific needs of current, retiring, and retired Olympic athletes.

Several limitations may be noted in the present research study. First, the number of participants was small because participation in the workshop was limited to elite athletes who competed in the sports of swimming and artisitic swimming in the Olympics between 1996 and 2016. Generalization of the present results to sub-elite or general athletes should therefore be with caution. Second, the effectiveness of the workshop was verified without a control group, considering the feasibility of having medalists participate. Finally, the career transition support intervention program was delivered only online.

Future researchers could replicate the current methodology to include broader sporting populations from more diverse populations. This would generate the opportunity to corroborate and enhance the generalisability of the findings. In addition, the findings of this study lend support for further research on self-help aspect of the intervention. Finally, qualitative research focused on career transition psychological support could inform further interventions, and is therefore worthy of further exploration.

# Conclusions

The aim of the research was to test the feasibility of an intervention program focused on career transition psychological support for retired Olympic athletes in Japan, as the extant literature showed that there has been limited research on evaluating sport career transition support programs. The investigation found, through pre- and post-analysis, that the program significantly enhanced knowledge about career transition support for athletes and also attitudes towards seeking career transition

support. Overall, the findings support several practical implications and new lines of enquiry associated with career transitions in sport. The results also provide evidence supporting the acceptability of the intervention from a feasibility perspective and serve to inform more rigorous tests of such an approach with retired athletes to support psychological adjustment difficulties.

#### **Author note**

A copy of the assessment questionnaire is available from the corresponding author (DL) upon request.

# **Declaration of competing interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### References

- Andrade, C., Menon, V., Ameen, S., & Kumar Praharaj, S. (2020). Designing and conducting knowledge, attitude, and practice surveys: Practical guidance. *Indian Journal of Psychological Medicine*, 42, 478–481. https://doi.org/10.1177/ 0253717620946111
- Breslin, G., Haughey, T., O'Brien, W., Caulfield, L., Robertson, A., & Lawlor, M. (2018). Increasing athlete knowledge of mental health and intentions to seek help: The State of Mind Ireland Pilot Program. *Journal of Clinical Sport Psychology*, 12, 39–56. https://doi.org/10.1123/jcsp.2016-0039
- Brown, G., & Potrac, P. (2009). You've not made the grade son: Deselection and identity disruption in elite level youth football. *Soccer and Society*, 10, 143–159.
- Bu, D., Chung, P.-K., Zhang, C.-Q., Liu, J., & Wang, X. (2020). Mental health literacy intervention on help-seeking in athletes: A systematic review. *International Journal of Environmental Research and Public Health*, 17(19), 7263. https://doi.org/10.3390/ ijerph17197263
- Cohen, S. (2004). Social support and health. New York: Oxford University Press. Cecić Erpič, S., Wylleman, P., & Zupančič, M (2004). The effect of athletic and non-
- athletic factors on the sports career termination process. *Psychology of Sport and Exercise*, 5, 45–59. https://doi.org/10.1016/S1469-0292(02)00046-8
- Cunningham, J. A., Gulliver, A., Farrer, L., Bennett, K., & Carron-Arthur, B. (2014). Internet interventions for mental health and addictions: Current findings and future directions. Current Psychiatry Reports, 16(12), 521. https://doi.org/10.1007/s11920-014-0521-5
- Hong, H. J., & Coffee, P. (2018). A psycho-educational curriculum for sport career transition practitioners: Development and evaluation. European Sport Management Quarterly, 18, 287–306. https://doi.org/10.1080/16184742.2017.1387925
- Lavallee, D., Park, S., & Taylor, J. (2014). Career transition among athletes: Is there life after sports? In J. M. Williams, & V. Krane (Eds.), Applied sport psychology: Personal growth to peak performance (7 ed., pp. 490–509). Mcgraw Hill.
- Leung, M. I., Carre, A., & Fu, F. H. (2005). Retirement rationale for Chinese female elite athletes. International Journal of Eastern Sport and Physical Education, 3, 87–94.
- Nakagomi, S. (2012). Intrapsychic adaptation to athletic retirement. Japanese Journal of Sport Psychology, 39, 31–46. https://doi.org/10.4146/jjspopsy.2011-21
- Oulevey, M. (2021). Design of psychological self-help support for Olympic athletes after retirement. Keio University, Japan (System design and management). PhD thesis 2021 12.1
- Park, S., Lavallee, D., & Tod, D. (2013). Athletes' career transition out of sport: A systematic review. *International Review of Sport and Exercise Psychology*, 6, 22–53. https://doi.org/10.1080/1750984X.2012.687053
- Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. London: Sage.
- Stambulova, N. B., & Ryba, T. V. (2013). Setting the bar: Towards a cultural praxis of athletes' careers. In N. Stambulova, & T. V. Ryba (Eds.), Athletes' careers across cultures (pp. 235–254). London: Routledge.
- Stambulova, N., Stephan, Y., & Jäphag, U. (2007). Athletic retirement: A cross-national comparison of elite French and Swedish athletes. Psychology of Sport and Exercise, 8, 101–118. https://doi.org/10.1016/j.psychsport.2006.05.002
- Stambulova, N., & Wylleman, P. (2014). Athletes' career development and transitions. In A. G. Papaioannou, & D. Hackfort (Eds.), Routledge companion to sport and exercise psychology: Global perspectives and fundamental concepts (pp. 605–620). London: Routledge.
- Toyoda, N., & Nakagomi, S. (1996). Undo sen-syu no kyo-gi intai ni kansuru kenkyu: Jiga douitsu sei no saitaisei-ka o megutte [A Study on athletic retirement of elite athletes: From the viewpoint of restructure of self-identity]. *Japanese Journal of Physical Education, Health and Sport Science, 41*, 192–206.
- Walden, D. D., Roedler, G. J., Forsberg, K., Hamelin, R. D., & Shortell, T. M. (2015). Systems engineering handbook: A guide for system life cycle processes and activities. John Wiley & Sons.
- Wylleman, P., Theeboom, M., & Lavallee, D. (2004). Successful athletic careers. In C. Spiilberger (Ed.), Encyclopedia of applied psychology (pp. 511–518). San Diego: Academic Press.