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Editorial

This issue finalises the first year of *Sport and Exercise Psychology Review (SEPR).* I have enjoyed working with authors and am eager to respond to your manuscripts and ideas in the future. To achieve its place as a useful forum, I believe SEPR should be broadly construed and disseminate scholarly reports and information on all aspects of sport and exercise psychology. I also feel that it should run the gamut of training issues for sport and exercise psychologists, methods employed (from case studies to survey-work on large populations), as well as topics related to teaching sport and exercise psychology. With this in mind, I am very pleased at both the breadth and depth of articles in this issue.

Featured in this issue is an article by Mark Andersen on confidentiality, privacy and privilege in sport psychology service delivery. Next, Mark Uphill and Marc Jones report a case study of a cognitive-behavourial intervention with a competitive golfer. The third article, by Albert Carron and Shauna Burke, is based on their keynote address at the 2005 BPS Quinquennial Conference, and provides a comprehensive overview of what contexts are superior in promoting physical activity. Jeffrey Martin then outlines a personal development model of sport psychology for athletes with disabilities. Mark Beauchamp and Ben Jackson's research note considers the notion that collective efficacy operates both as a predictor as well as a consequence of team performance in sport. Melissa Day, in the Student Members' section, provides a review of the electronic version of the *Directory of Graduate Programs in Applied Sport Psychology.* This is followed by three commentaries based on articles from the January 2005 issue of *SEPR.* First, Guy Faulkner and Sara-Jane Finlay build upon the previous 'Talking to the Press' commentaries by highlighting the importance of researching the effectiveness and impact of media coverage. Christopher Spray and Richard Keegan then comment on achievement goals in sport and exercise psychology, while David Tod and Joanne Thatcher reflect on challenges for the DSEP. Book reviews of *Sport Psychology: Theory, Applications & Issues* (2nd edition) and *Skill Acquisition in Sport: Research, Theory and Practice* are provided by Caroline Douglas and Ian Renshaw, respectively. Finally, Paul Russell reports on the BPS 2005 Quinquennial Conference.

I would like to draw readers' attention to Bulletin Board, which contains sad news concerning the death of Precilla Choi. Precilla was an active member of several BPS subsystems, and the DSEP will always remember her with great affection. The Bulletin Board also contains important information about statutory regulation, applying for full membership and registration as a chartered psychologist, and the DSEP's new website.

DAVID LAVALLEE
October 2005

PhD Prize

THE BPS Division of Sport and Exercise Psychology has established an annual prize to be awarded to the PhD student from a university in the United Kingdom whose thesis is regarded to be an exceptional, innovative contribution to knowledge in the field. Research on any aspect of sport and exercise psychology is eligible. The winner will receive £250 and be invited to deliver a presentation based on their thesis at the annual conference. The winner will also be invited to submit an article for publication in *Sport and Exercise Psychology Review*. Such an article would be subject to the normal review process.

Theses may be nominated for the award only by the student's PhD supervisor(s). In order to nominate a thesis, the supervisor(s) should submit a report that outlines in what way the thesis makes an outstanding contribution to the discipline. In particular, supervisors are asked to comment on the theoretical contribution, methodological rigour and long-term impact on the discipline. A proforma will be supplied to supervisors wishing to make a nomination, which includes an extended abstract of the thesis, registration details and any publications derived from research carried out for the doctoral degree and of which the candidate is the sole or senior author.

The supervisor's report, candidate's form and the extended abstract for the thesis should be returned to:

Dr Joanne Thatcher
Honorary Secretary, BPS Division of Sport and Exercise Psychology
University of Wales, Aberystwyth
Department of Sport & Exercise Science
Penglais Campus
Ceredigion SY23 3FD
United Kingdom

Nominations should be made within one calendar year of the PhD being awarded, and will be judged by the PhD Prize Committee established by the Division of Sport and Exercise Psychology. Nominations should be submitted by March 1 each year and will be considered at the time of the Division of Sport and Exercise Psychology AGM held in conjunction with the BPS Annual Conference.

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'Yeah, I work with Beckham': Issues of confidentiality, privacy and privilege in sport psychology service delivery

Mark B. Andersen

The interrelated constructs of privacy, confidentiality and privilege, much discussed in legal and medical arenas, are sometimes given perfunctory treatment in the education and training of sport psychologists. This article briefly traces the history, debate, and practices of ethical delivery of service from Hippocrates to current sport psychology professional relationships. Sport psychologists often operate in looser environments (e.g. on the pool deck, courtside, in the locker room) than those of other psychologists, and it seems that some concepts of ethical practice, such as confidentiality, are also looser (Andersen, Van Raalte, & Brewer, 2001). This looseness in the field may be, in part, a result of the myriad educational and training pathways people take to get to the point of acting in psychological caring roles with athletes and coaches. This article is a strident questioning of some of the ethically loose practices of individuals and sport institutes in the world of sport psychology services. The author hopes it sparks some lively debate.

OF COURSE, I have never met, much less worked with, David Beckham. And even if I had, I could not say that we had discussed his performance concerns, his leaving Manchester United, or even his hair. If it were public knowledge that I was employed as a sport psychologist for Real Madrid or the England football team, I still could not even say that Beckham and I had (or had not) met and talked. Now someone might say 'That's not exactly true. If you had Beckham's permission and informed consent to let people know you had worked with him then you could say so.' By the letter of most psychological associations' codes of ethical conduct, that statement would be correct. I will argue, later in this article, however, that the 'maps' of ethical codes of conduct are not necessarily the 'territories' of ethical practice, and that even this 'with consent' proviso to speak publicly about a client is ethically suspect. First, what may be helpful is a look at the interrelated ethical constructs of privacy, confidentiality and privilege.

Privacy

The right to privacy has its roots in Western philosophical traditions, and is the foundation for the ethical principle of confidentiality. Privacy is part of many countries' constitutions and helps preserve dignity and freedom. Privacy is not only about the rights of persons to hold their thoughts, opinions, beliefs and personal data to themselves and feel secure, but it is also about having control over how and whether (if at all) any of that information could or should fall into the hands of others. Privacy serves, philosophically, as both the deontological (moral necessity, duty, or obligation) and axiological (what is valued or valuable) bases of confidentiality and privilege.

Confidentiality

The godfather, and I use that appellation in deep reverence, of ethical practice in all helping professions was (and will ever be) Hippocrates (b. 460 BC). His formulation of confidentiality, in the Oath that most all Western physicians take (in a modern or ancient form), even after 24 centuries, still stands.

> *Whatever, in connection with my professional service, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret.*

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> *While I continue to keep this Oath unviolated, may it be granted me to enjoy life and the practice of the art, respected by all men, in all times. But should I trespass and violate this Oath, may the reverse be my lot.*

The issue of confidentiality is the last item in the Hippocratic Oath and is immediately followed by the two sentences I have added to the usually cited passage. These two sentences are beautiful end punctuations to how serious Hippocrates believed these standards of practice to be. He essentially finishes off the Oath with 'If I violate these laws of practice (e.g. doing no harm, confidentiality, no sexual intimacy with patients), then I should be damned.' Hippocrates, like Darwin and Freud, to me, have near god-like stature. The rest of us, however, are mere mortals and subject to human – all-too-human – responses to clients, media, and our own needs and desires. The world does not need to know that David Beckham and any psychologist have a professional relationship, and giving the world that information does nothing to help David Beckham, violates the territory of confidentiality, and serves the psychologist through possibly increasing credibility, perhaps satisfying self-aggrandising narcissistic needs, and maybe even helping secure some future financial gain. Many breaches of confidentiality in (sport) psychology service are actually subtle forms of exploitation.

The ethical principle of confidentiality is the foundation upon which a viable and healthy working alliance is formed. Clients need to feel safe and secure in disclosing anything to their psychologists. If they do not, then trust and respect cannot develop, important material may not emerge, and therapy or counselling will probably be relatively ineffective. Confidentiality is embedded in the warp and weft of the therapeutic relationship fabric, and it stands along with respect for human dignity and freedom, unconditional positive regard, and the creation of an environment free of threat (see Rogers, 1957). The message of confidentiality informs the client that whatever is said (with a couple extreme exceptions) the information will be treated with respect, the right to privacy will hold (see previous section) and that one need not fear that secrets will be communicated to others. This threat-free and respectful environment supplies the basis of permission for the clients to be themselves, with their joys, fears, hopes, dreams, peccadillos, and warts and all. It also allows for the healthy development of positive transference and countertransference (cf. Andersen, 2005). Simply put, we can't deliver service without it.

Confidentiality and the identified client

Confidentiality, at first, appears relatively straightforward, but it is not (see Kremer, 2002). As sport psychologists, we are bound to keep the client's confidence, but the questions arise: (a) who is the client? and (b) what are the contractual obligations? In many cases, sport psychologists are employed by national governing bodies (NGB), by team administrators, by sports medicine groups, or by parents and not by individual athletes. A contract with an NGB implies certain obligations to that organisation. It may be that the sport psychologist is employed to figure out where things are going well for the athletes and coaches and where they are not. Interviews and encounters with the athletes and coaches then need to be couched in terms of the sport psychologist being brought in to help the NGB create a more salubrious environment. This service is similar to the work of many organisational psychologists. A sport psychologist in this role would not specifically relate to the NGB what individual athletes and coaches had said, but would report on the general atmosphere of the team, what needs of coaches and athletes were being met, which needs were not being addressed, and so forth. Individual confidentiality would be maintained, but general confidentiality would be waived. The psychologist would then make suggestions for changes, actions, or other interventions to help improve the sport for all involved. For an example

of sport psychologists working at this organisational level (i.e., sports medicine groups) and the different entry points for interventions see Andersen and Brewer (1995).

I also know of many cases where coaches contact a sport psychologist to work with athletes, but also ask for service and feedback on their coaching and how they can better communicate with individual athletes. Couple that scenario with a team manager handling payment, and we end up with the sport psychologist serving several masters. Who gets to know what? Certainly a coach could benefit from knowing that a certain athlete responds better to kicks up the bum than to pats on the back, but telling a coach what an athlete needs still requires permission from the athlete. Most parents love their children and want the best for them, and many have strong needs to know what is happening with their offspring. Subtle, and not so subtle, pressures from parents to obtain information from the sport psychologist about their children are some of the most frequently encountered confidentiality quagmires my students face. Managers holding the purse strings would certainly want to know about what value they are getting for their money and what changes in athletes, team environments and coaching practices are in the works. See the section below on the training of sport psychologists regarding how to talk to coaches, and by extrapolation, to administrators and parents about the issues of confidentiality and privacy in service delivery.

Privilege

Privilege is actually a legal term associated with confidentiality. Laws in many countries require people to testify in court so that all of the information that can possibly be obtained on a particular case is brought to light. However, legal systems do recognise that there are special relationships intimately associated with (usually) constitutional rights to privacy, and information revealed in such relationships comes under the aegis of 'privileged communication'. Examples of these special relationships include: husband and wife (in some countries even same-sex partners); clergy and those in confession or pastoral care; physicians and patients; solicitors (lawyers) and clients; and psychotherapists (psychologists, psychiatrists, counsellors, social workers) and those they help. The issue of privilege may come up for sport psychologists in cases of malpractice or other instances where progress notes are subpoenaed, or the psychologist is asked to testify for or against a current or past client.

Violations of, and exceptions to, the principle of confidentiality

The seemingly innocuous. Coaches often mistakenly believe that psychological testing can predict who will be good competitors. Some sport psychologists comply with coaches' wishes to test their athletes, and present coaches with psychometric results. Usually consent is obtained from athletes to pass on results, sometimes it is not. Even when consent is given (see below), how truly free is the athlete to grant such consent? And if coaching decisions, such as selection, amount of playing time, or position on the team are based, in part, on tests results being made available, then the dictum of 'do no harm' may be violated. The other ethical issue in this case is the misuse of psychometric instruments, but that topic would require a whole paper in itself (cf. Sechrest *et al.*, 1996; Schutz & Gessaroli, 1993).

The casual mention of a famous athlete's name as a person one has worked with also seems innocuous enough. This name-dropping, without permission, is, however, a breach of confidentiality. As stated in Section 4 of the British Psychological Society's (1993) code of conduct, covering confidentiality, psychologists shall:

> *convey personally identifiable information obtained in the course of professional work to others, only with the expressed permission of those who would be identified, (subject* always *to the best interests of recipients of services or participants in research and subject to the requirements of law and agreed working practices)*

The emphasis is are mine. When is a sport psychologist's naming of a famous client in that client's best interests? Probably never. 'Expressed permission' to identify a client may be clear on the map of ethical conduct, but the territory of ethical practice is murkier. Asking permission to use a client's name brings up all sorts of issues. Power differentials often exist between clients and practitioners, and such a request for a favour from the sport psychologist carries with it seeds of coercion, playing on gratitude and subtly implied obligation. If clients in any way feel obligated to let the sport psychologist use their names, then another ethical problem arises, and that is 'free and informed consent'. Murkier and murkier. The answer to the question 'Who is being served?' is obviously the wrong one, and it is the sport psychologist who is possibly exploiting the athlete for status and narcissistic needs. This name-dropping could also be considered a form of advertising, implying that a famous athlete's performance is due in part to the work of the psychologist. The BPS code states clearly 'avoid the use of testimonials in advertisements for psychological services', and although name-dropping is not a testimonial, it certainly fits in the territory of forbidden practice implied by this prohibition.

The truly egregious

Heyman and Andersen (1998) told the story of a homophobic sport psychologist whose client revealed that he was gay. The psychologist violated confidentiality by informing the coach. The coach kicked the athlete off the team. Such abuse of trust is beyond the pale. In my conversations with athletes and sport psychologists, such horror stories are all too common. I recall clearly the disastrous results of a sport psychologist, who was well-meaning but ignorant, telling an athlete's mother that the athlete had an eating disorder.

The systemic

Sport psychology services have widely varied histories depending on which country one observes. Models for service across the globe have different foci, and Stambulova (2004) has presented a concise description of the current (and past) models in use. Her 2004 book chapter is in Swedish, but is available from the author in English (see Reference section). The first genus of models she presents is labelled 'performance models'. Confidentiality becomes problematic in these models because the focus is primarily on behaviour (i.e., performance) and not necessarily the happiness and well-being of the athlete. These models have been seen in the USA during the early days of sport psychology, and still flourish there in some training institutes. The full flower of these models, and the confidentiality issues surrounding them, are best seen in the Soviet system of training athletes. The ultimate client of the performance model of sport psychology service delivery in the Soviet system was the State. Athletes were the means to the ends of showing the superiority of communism and the glorification of the Soviet system. After the State, the next client was the coach. All information regarding the psychological strengths and weaknesses of athletes was available to the coach in order to gain knowledge useful for enhancing performance. Thus, there was no confidentiality, and anything said, or any test results stemming from sport psychologists' encounters with athletes, were immediately available to the coach. Arguably, the dominance in the 1960s and 1970s of countries such as the German Democratic Republic and the Soviet Union was due, in part, to this extreme version of sport psychology service. Today, most sport psychologists would view this model as exploitative and contrary to the humanistic goals of psychology.

Recently, however, this model has emerged in a new pseudo-sensitive form in a major national institute of sport on the world stage. The former Sport Psychology Department of this institute is now called the 'Performance Psychology Department'. In this new system, the coach is the client, and any information the athlete reveals in sport psychology ses-

sions is available to the coach. The practitioners get around the problem of confidentiality by informing the athletes that anything they say in sessions with 'performance psychologists' may be transmitted to the coaches. Their caveat to the athletes is: 'So, if you don't want some information about you getting back to the coach, then please don't talk to us about whatever it is.' This tact will probably not help athletes feel secure and open up about their problems. If athletes make appointments with the Performance Psychology Department, and the practitioners have heard nothing from the coaches, then the first step is to call the coaches, inform them of the appointment, and inquire as to what the coaches know about the athletes' concerns and why they might be seeking services. The right to privacy is violated even before the athlete speaks to a psychologist. This exploitative neo-Soviet system is a major step backwards for the field. The end result will most likely be that some athletes will be helped with performance and that many athletes will clam up, and struggle with their problems alone.

The required

In many countries, psychologists are required by law, and by their ethical codes, to waive confidentiality. Evidence of child or elder abuse and threat of harm to self or others (and accompanying duty to warn) are examples of instances where breaks in confidentiality are mandated. The duty to warn stems from the Tarasoff case (Tarasoff v. The Regents of the University of California, 1976). A student-client in counselling was distraught with the break-up of a relationship with a woman and revealed in counselling that he was contemplating hurting her. The counsellor informed the school security personnel. They questioned him, decided that he was not a serious threat, and released him. He later killed Ms Tarasoff. The threat, voiced in the counselling relationship, to Ms Tarasoff was later revealed, and the family of the victim brought suit. The court ruled that the counsellor should have done more and should have informed Ms Tarasoff that she was at risk.

The rules about when confidentiality will be waived are quite clear in most countries. What is not so clear is whether sport psychologists spell out, in unmistakeable terms, these rules to their clients from the very beginning of service. It is awkward to inform clients that if the psychologist hears evidence of harm to self or others, that the sanctity of confidentiality will be broken. This reticence to bring up the topic is something sport psychologists will have to get over. If they feel awkward or uncomfortable talking over these issues, and avoid them, then in many countries they are actually in violation of their own ethical codes. In the American Psychological Association's *Ethical Principles of Psychologists* (APA, 2002) it clearly states:

> *4.02 Discussing the Limits of Confidentiality*
> *(a) Psychologists discuss with persons (including, to the extent feasible, persons who are legally incapable of giving informed consent and their legal representatives) and organizations with whom they establish a scientific or professional relationship (1) the relevant limits of confidentiality and (2) the foreseeable uses of the information generated through their psychological activities. (See also Standard 3.10, Informed Consent.)*
> *(b) Unless it is not feasible or is contraindicated, the discussion of confidentiality occurs at the outset of the relationship and thereafter as new circumstances may warrant.*
> *(c) Psychologists who offer services, products, or information via electronic transmission inform clients/patients of the risks to privacy and limits of confidentiality.*

The BPS has similar guidelines. See Cogan (2000) for a good case example of the ethical and legal problems associated with working with a suicidal athlete where the issue of breaking confidentiality is illustrated.

Confidentiality and working with teams

In one-on-one sessions behind closed doors, confidentiality is a relatively straightforward issue. In group work with whole teams, or subgroups within a team, confidentiality becomes problematic. The sport psychologist

has no control over what athletes say outside of the team sessions. Sensitive material sometimes emerges in group settings, and may be communicated to others outside the team. I usually begin group work with something like this: 'OK, folks, I would like to start today with saying that this time is "our time". And I want everyone to be as comfortable as possible and feel free to bring up any concerns you might have. To help people feel comfortable, I would like that we come to an agreement that what we say in here stays in here. The stuff we discuss is our stuff and not for others. This way we make sure everyone's contributions are valued and respected. How does that sound?' The early laying down of mutually agreed ground rules of individual and group respect may go a long way in obviating the thorny problem of confidentiality when working with whole teams.

The training of sport psychologists

I hope that all sport psychologists would agree that training in ethical principles and behaviour is of paramount importance for students and practitioners. Over the past three decades, numerous articles and book chapters on ethics have appeared in the sport and exercise psychology literature (e.g. Andersen, 1994, 2004, 2005; Andersen, Van Raalte, & Brewer, 2000; Heyman, 1990; Makarowski, 1999; Nideffer, 1982; Petitpas *et al.*, 1994; Sachs, 1993; Taylor, 1994; Whelan*et al.*, 2002; Zeigler, 1987).

Besides a thorough reading and discussion of the nationally relevant codes of ethics for psychologists in training, a practical and much needed start is to train students in how to talk to athletes and their coaches about the issues of privacy, confidentiality and privilege. Most athletes and coaches are, of course, not psychologists and do not have firm grasps of these foundational principles. Also, too many potential clients have less than positive experiences with so-called sport psychologists where these principles were routinely violated. So how does one talk to the athlete, and how does one talk to the coach?

In many cases, the coach is the first port of call with requests for services. We train our students to engage in a conversation that goes something like this: 'Coach, for many of your athletes, they are going to want some help with things like staying focussed, relaxing, running their events over in their heads, and so forth. For them, the services will be mainly about performance enhancement strategies. For some of your other athletes, their performances may be deeply tied to feelings of worth, parental pressures, big anxieties about what you think of them, and other problems outside of sport. For all the athletes I work with, I encourage them to let you know what we are working on, but I also need to let them all know that what passes between me and them is confidential and doesn't go outside our sessions unless they want it to. Some athletes may need to talk about stuff that they would be embarrassed or anxious about if you knew. By keeping things confidential, it frees the athletes to say whatever is on their minds, and helps the athletes and me get to the source of their worries. It's all part of the ethical code of my profession, and it's there to ensure the privacy of the athletes, and the development of a trusting open relationship. That trust and confidence is what will help me help the athletes get the most out of their sports and maybe help in other aspects of their lives too.' Variations of this talk can also be used with sports medicine personnel, parents and administrators. Additionally, we recommend that students supply some reading material, or bibliotherapy, for coaches, managers, physiotherapists and parents about ethical practice. We will probably use this article as a source for *involved others'* education in the future.

In our training of sport psychologists, we role play the 'confidentiality' talk with accepting, skeptical, and resistant (even hostile) coaches, so students can learn to speak about these sensitive issues in a non-threatening and athlete-oriented manner. We also have students rehearse similar talks with athletes. In those role plays we add 'Because I am a student, the only other person I will

talk to about what goes on here is my supervisor. I need to do that because I am learning, and my supervisor will give me feedback that will help me work with you in an even better way. My supervisor will not be talking to the coach or anyone else about what we are doing.'

In the training of sport psychologists, many of us use examples from our own experiences for classroom discussions. Sport psychologists' work with athletes and coaches provides many rich and educational examples of ethical quandaries that benefit students. The personal experiences might have an added punch if one used well-known athletes' names, and I have heard sport psychology educators do just that. In doing so, however, one would model that it is quite all right to use names and events, and a message would be sent that confidentiality does not necessarily hold in the classroom. That message may then be generalised to other settings. I say to my students, 'I will be using lots of examples from my own work, but I will disguise the names, and even the sports sometimes, in respect for the privacy of my clients.' Concrete and consistent messages are what will help students internalise the principles of privacy, confidentiality and privilege.

Another valuable resource for classroom discussions and practicum exercises is a chapter by Lavallee, Cockerill and Kremer (2002). They present some case examples of working with athletes, coaches, and even family members. The cases are presented with sufficient information about what may be happening, but are suitably vague enough to allow for multiple interpretations of the presenting concerns. The ethical and service issues cover a wide range of topics including self- and coach-harm through overtraining, parental over-involvement, possible coach sexual abuse, pathological dependency, suspected eating disorders, and intimations that a depressive episode is starting or that substance abuse is involved. Each case brings up questions of ethical and legal concerns, potential courses of actions, and the advantages and disadvantages of what the sport psychologist may, or may not, do. Because each scenario is not a full-blown case study, students and instructors can develop several alternative formulations and go on to discuss the ramifications of each. This process highlights a central issue in training and understanding service. It helps students appreciate that in the real-world there truly are no simple or single interpretations of athlete concerns, and that when we examine what seem to be complex cases in depth, they usually tend to become even more complex and convoluted. There are few better lessons to learn than that one.

Along with specific training in confidentiality issues, ethics and ethical decision making form a part of all subjects we teach whether it be research, assessment, history of sport psychology, professional practice or even the issues of traveling with a team. We would welcome contact from any readers about all these issues and how they have gone about training students along with scenarios they have used or experienced in the realm of ethical difficulties and decision making.

Moot points

Finally, all the strident arguments above may ultimately be, for many people practicing in the field, a lot of sound and fury signifying not too much. The reality of real-world sport psychology service delivery is that many, if not most, of the people engaged in practice are not registered, chartered or licensed psychologists. Out of the 100-plus training institutes in North America where people can obtain graduate degrees in the area of sport psychology, only a handful are in psychology departments. The same is true in the U.K. So, much of the training does not lead to eligibility to practice using the protected word 'psychologist'. If one is not licensed, chartered or registered as a psychologist, then one is not bound by the national codes of ethics. And legally, but not ethically, one can do and say all sorts of things.

With every new intake of sport psychol-

ogy graduate students into our programme, we start them off with many warnings about venturing into this field. One point we emphasise is that there are many people out there calling themselves sport psychologists, or mental coaches, or performance counsellors who practice unethically and leave trails of alienation behind them. Charlatans, quacks and really needy people abound. They tarnish the field and make it difficult for those who practice ethically. Our reputation as a helping profession is constantly threatened, and every semester some new examples of ethical turpitude crop up to slam home the point to our students. It's a constant battle, and our students are the ones who will have to continue the fight. Sport psychologists may practice in 'loose' settings, but our ethical beliefs and behaviours need to be compulsively tight.

The author

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Sport & Exercise Psychology Review

We welcome articles from members on any aspect of sport and exercise psychology – see the inside back cover for details about how to contribute.

Articles: Individual articles will be published on all aspect of sport and exercise psychology, and may provide a broad overview of a particular issueor add a critical commentary on recent articles in SEPR.

Conference Reports: Reports on conferences of interest to the Division of Sport and Exercise Psychology are welcome, but it is suggested to contact the Editor first.

Research Notes: Informative reviews papers published in peer-reviewed journals that would be of interest to the SPER readership are included in this feature. Please send a copy of the full paper to the Editor along with the Research Note.

Book Reviews: Persons interested in writing a book review should contact the Editor in the first instance, as books are generally reviewed by invitation only.

Student Members: Items of particular relevance to student members of the Division of Sport and Exercise Psychology will be included in this regular feature.

Coping with, and reducing the number of careless shots: A case study with a county golfer

Mark A. Uphill & Marc V. Jones

A county level golfer reported that when his concentration wavered, the consistency of his pre-shot routine broke down and he played what he termed 'sloppy' (or careless) shots. After playing a careless shot, the participant would often become angry and annoyed and the associated feelings remained with him, leading to errors on successive holes. A pre-shot routine comprised the basis of the intervention which was designed to assist the participant cope with, and reduce, the number of careless shots. Results suggested that the intervention was effective at reducing the relative number of careless shots and enhancing specific performance attributes (e.g. motivation). Little change in the participant's emotional state pre- to post-intervention was observed. Although further research is necessary, this case study suggests that performance routines may be used to help athletes cope adaptively with errors by refocusing attention.

AT THE START of the intervention the participant was a 28-year-old male golfer with a handicap of 1.2 who was employed full time as a marketing coordinator. In an e-mail initiating contact with the second author[1] and follow-up interview, the participant indicated that several facets of his mental approach could be improved. He commented that when his concentration wavered, the consistency of his pre-shot routine broke down and he played careless (or what he termed 'sloppy') shots. After playing a careless shot, the participant would often become angry and annoyed and the associated feelings and cognitions (e.g. 'I shouldn't have played that shot') remained with him, often leading to errors on successive holes.

Alongside the initial interview and e-mail, data from a specifically designed 'golf booklet' was collected over six competitions which, firstly, provided baseline data upon which to assess the efficacy of the intervention and, secondly, collectively helped formulate a cognitive behavioural intervention tailored to the requirements of the individual. The golf booklet was completed after each round of golf and comprised, *for each careless shot that occurred*, (a) a description of the situation preceding the careless shot (a measure of golf performance was attained by calculating the ratio of sloppy shots: holes played); (b) an assessment of pre-shot concentration on a Likert-type scale ranging from 1 'not at all' to 10 'very much so'; (c) an assessment of the intensity of a range of emotions on a Likert-type scale ranging from 0 'not at all' to 4 'extremely'; and (d) an evaluation of whether these emotions debilitated or facilitated selected performance attributes on a Likert-type scale ranging from -3 'very debilitated' through 0 'neutral' to 3 'very facilitated'. Emotions assessed in this study (anger, anxiety, disappointment, embarrassment, regret, panic) were selected in conjunction with the participant who felt that these could be experienced after playing a careless shot. The performance attributes (rhythm, motiva-

[1]The intervention was delivered jointly by the first author (British Association of Sport & Exercise Sciences (BASES) Probationary Sport Psychologist undertaking supervised experience) and the second author (British Psychological Society Chartered Psychologist & BASES Accredited Sport Psychologist).

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tion, post-shot concentration, shot selection, confidence) were those that the participant believed were affected following a careless shot. A performance profile (Butler & Hardy, 1992) was also completed in collaboration with the participant to increase awareness of the performance attributes that contribute to success in golf.

Problem formulation

Data collected from the interview and golf booklet collectively suggested that occasional lapses in concentration preceded the occurrence of careless shots, which elicited a range of negatively toned emotions, particularly anger, anxiety and disappointment (see Table 1). This emotional state was perceived to have a debilitative impact upon components of golf performance. Triangulating the information derived from the interview, the golf booklet and the performance profile indicated that the participant prioritised concentration as a psychological attribute to develop.

Concentration is regarded as one component of the multidimensional construct of attention and refers to a 'person's ability to exert deliberate mental effort on what is most important in any given situation' (Moran, 2004, p.103). For expert performers, self-paced skills such as hitting a golf ball are typically performed without conscious attention to the 'mechanics' of the intended movement (Mullen & Hardy, 2000). Coupled with the large amount of 'thinking time' inherent in many self-paced skills including golf, expert performers may be susceptible to internal and external distractions in the seconds preceding performance (Beauchamp, Halliwell, Fournier, & Koestner, 1996; Boutcher & Rotella, 1987).

Pre-performance routines consist of a 'sequence of task-relevant thoughts and actions which an athlete engages in systematically prior to his or her performance of a specific sport skill' (Moran, 1996, p.177), and have been proposed to help participants maintain performance in the face of potential distractions (Boutcher, 1990). Despite some evidence that pre-performance routines are associated with enhanced concentration and performance (Boutcher & Zinsser, 1990; Lobmeyer & Wasserman, 1986), there remains a need to further understand the impact of pre-performance routines on a range of psychological and per-

Table 1: Descriptive and inferential statistics for pre- and post-intervention

	Mean (±SD)		Autocorrelation Coefficient					
	Pre	Post	Pre	Post	df	t	p	ES
Sloppy Shots	0.31 (0.11)	0.16 (0.09)	0.05	-0.29	5	2.47	.06	1.37
Pre-Shot Concentration	4.55 (0.88)	5.74 (1.49)	0.45	0.18	5	-2.27	.07	-1.36
Anger	1.94 (0.41)	1.91 (0.55)	0.26	-0.25	5	.06	.95	0.05
Anxiety	1.71 (1.24)	2.06 (0.85)	0.08	-0.46	5	-.48	.65	-0.27
Disappointment	2.55 (0.55)	2.39 (0.91)	-0.16	-0.43	5	.29	.78	0.30
Embarrassment	0.19 (0.18)	0.08 (0.20)	-0.33	-0.23	5	.78	.47	0.60
Regret	1.64 (0.42)	0.61 (0.82)	-0.20	0.45	5	3.01	.03	2.46
Panic	0.98 (0.81)	0.69 (1.09)	-0.17	-0.57	5	.41	.70	0.35
Rhythm	-0.69 (0.54)	-0.19 (0.92)	0.09	0.08	5	-.96	.38	-0.91
Motivation	-0.37 (0.62)	1.41 (0.33)	0.20	0.06	5	-5.59	.003	-2.87
Post-shot Concentration	-1.11 (0.67)	1.41 (0.32)	-0.19	0.06	5	-12.42	.001	-3.71
Shot Selection	-0.61 (0.35)	0.61 (0.85)	-0.44	-0.49	5	-2.37	.06	-1.94
Confidence	-1.49 (0.61)	-0.95 (0.65)	-0.56	-0.49	5	-1.90	.12	-0.89

formance outcomes (cf. Holder, 2003).

Although the use of pre-shot routines may reduce the likelihood of errors occurring, it is inconceivable that mistakes can be eliminated altogether. Therefore, when errors do arise, what is required is the capacity to cope with them adaptively. Coping is often conceptualised as cognitive and/or behavioural efforts to deal with internal and/or external demands appraised as exceeding the resources of individuals (Lazarus & Folkman, 1984), and may temporally precede an emotion following an initial appraisal of harm, threat or challenge, or flow from an emotion (Lazarus, 1991). Lazarus suggests that coping efforts can be classified into one of two categories. Problem-focussed coping involves taking action to change an aspect of the person-environment relationship (e.g. distancing oneself from a stressor). Emotion-focussed coping on the other hand, alters only what is in the mind of the individual (e.g. re-direction of attention).

A modest, albeit increasing amount of literature, has been directed toward coping with errors in psychology generally (e.g. Goldberg *et al.*, 2002), and more specifically in sport. For instance, although Holt and Hogg (2002) reported that female soccer players used positive self-talk, problem-solving talk, and imagining past successes to cope with errors, the impact of these strategies on athletes' emotional state or performance was not addressed. Theoretically, the use of emotion-focussed coping strategies may be advantageous given the lack of control athletes have over many errors which have occurred (Uphill & Jones, 2004). Cognitive and behavioural efforts to cope with errors, when used systematically, could be described as a post-mistake routine (cf. Moran, 2004). In golf, where competitors are typically required to perform successive strokes, possibly after making an error, the pre-shot routine of the following shot can be considered an important part of dealing with any errors that have occurred in a previous shot. Despite the positive theoretical and/or empirical evidence reported above, there remains a need to understand the impact of performance routines on the psychological attributes that may mediate performance outcomes (Holder, 2003).

Intervention

To alleviate any misconceptions or apprehension about sport psychology, the participant was provided with information about the nature of sport psychology, and examples of skills that would likely be used (e.g. imagery) prior to the intervention. An emphasis was placed on enhancing pre-existing psychological attributes, and the need to practice psychological skills as one would practice technical skills (cf. Weinberg & Williams, 2001). With informed consent attained, the intervention was delivered over a five-month period and comprised five sessions (each lasting about 60 minutes), designed to review and extend the participant's pre-shot routine and to help him cope constructively with errors.

The intervention commenced with a review of his existing pre-shot routine. In a detailed interview, the participant outlined that his initial routine was predominantly behavioural. He would (a) stand behind the ball and pick a target to which he intended to direct the ball; (b) approach the ball and align the club head and right hand behind the ball; (c) align his body position then redirect his gaze to the target whilst 'waggling' his club; and finally (d) strike the ball. The participant remarked that he was a 'natural' player and did not wish to use an elaborate, regimented routine. At the end of this session the first author accompanied the participant on a round of golf and digitally recorded his routine prior to every shot on a nine-hole round of golf.

A second session provided the participant with the opportunity to view his recorded pre-shot routine and describe retrospectively the purpose of each phase of his existing pre-shot routine. Appropriate psychological strategies were introduced. Video observation of the participant's pre-shot routine was

received favourably by the participant and he commented that he would be deciding upon an appropriate shot to play as he approached the ball, accounting for the position of the pin, the lie of the ball, wind direction, etc. Once he had removed the club from the bag the participant had committed to the shot he intended to play.

In collaboration with the participant, rather than disrupt a well-established routine it was decided to extend the duration of the routine, incorporating appropriate psychological skills *prior* to the behavioural components. It was decided that the most appropriate time at which to initiate an extended routine would be as the participant removed the club from the bag. Indeed, the participant likened the space between the bag of clubs and the ball as a 'box'; upon entering the box the participant recognised that the routine had started. By involving the participant in the decision-making process of when to incorporate the selected psychological skills, 'ownership' of the intervention and associated adherence is likely to be enhanced (Shambrook & Bull, 1999).

As the participant stood behind the ball lining it up, it was suggested that he verbalise or confirm to himself the intended shot (e.g. draw). This verbal 'anchor' was considered important as it would vary with each shot and a potential limitation associated with the use of pre-shot routines is that over time they become automatic, leaving athletes vulnerable to the distractions the routine is intended to reduce (Lavallee *et al.*, 2004). Having verbalised the shot, it was recommended he take a practice swing and imagine the successful execution of the intended shot. When questioned, the participant revealed that he felt it easier to imagine the 'feel' of the swing, rather than 'visualise' the swing. The use of kinaesthetic imagery, which entails imagining the 'feel' of certain actions (Martin, Moritz & Hall, 1999), was therefore recommended. Having discussed the extension to his routine, the participant physically rehearsed his new pre-shot routine on a sport field at the authors' place of work (at the time of the intervention, both authors were at the same institution). To reinforce learning of the new routine the participant was also asked to write the word 'routine' on his scorecard. The participant was comfortable with this idea as he employed the same approach when reminding himself to modify a small aspect of his technique. The participant was then required to rehearse this extended pre-shot routine in a range of scenarios (e.g. driving range, practice rounds) before transferring to competition.

Recognising that psychological skills take time to learn and integrate effectively into competition, the following three sessions provided an opportunity to review and monitor the participant's progress with, and adherence to, his new routine. In the first of these sessions the participant remarked that he used the word 'Now' as a cue to focus on the present once he set the bag of clubs down. He commented that he was trying to verbally tell himself which shot to play, picture where he wanted the ball to land, feel the shot (with a practice swing) and to then behaviourally set up and execute the shot. Moreover, when returning the club to the bag the participant reported using the word 'Finish' to signal the end of the shot, regardless of outcome. In the next session, although the participant felt that overall the routine was proving to be beneficial he also noted that he was not using the routine consistently, forgetting to use it on some holes. By the third review, however, the participant commented that he had used the pre-shot routine on virtually all holes of a non-competitive round of golf and that generally he felt he was going into most shots committed to the shot he intended to play. Although he remarked that he was not integrating imagery into his routine as effectively as he would like, he recognised it would take time to do so and was generally positive about the progress that he was making.

Results

The effectiveness of the intervention was analysed using visual and statistical techniques. All data were graphed and analysed. For brevity, only those results demonstrating a large effect size are illustrated (see Figure 1). Visual inspection followed guidelines outlined by Martin and Pear (1996). Although visual inspection may reduce the likelihood of identifying small treatment effects (Baer, 1977), the use of visual inspection alone to judge the efficacy of an intervention is controversial (Gottman, 1981). Accordingly, two complementary analyses were completed to evaluate the statistical and practical significance of the intervention respectively. First, in the absence of serial dependency,[2] pre- and post-intervention data were analysed using paired-samples t-tests (a Bonferroni correction was used to control for inflation of type 1 error, adjusted alpha = .003). Second, effect sizes were calculated[3] and evaluated using the benchmarks provided by Cohen (1977). Specifically, an effect size of less than 0.2 is designated small, 0.5 is moderate, and 0.8 or greater is large. Finally, social validation of the intervention was assessed via the administration of the sport psychologist consultant evaluation form (Partington & Orlick, 1987), and an e-mail from the participant 24 months later.

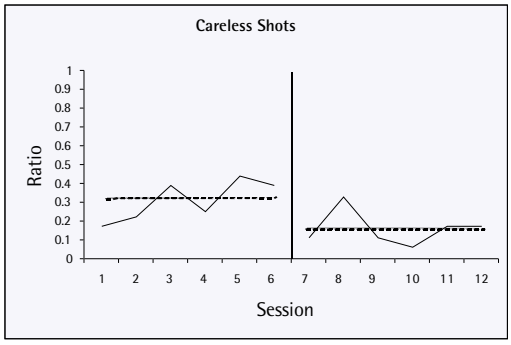
Figure 1 illustrates there was an immediate reduction in the relative frequency of careless shots post-intervention and few overlapping data points. Indeed, the ratio of careless shots to holes played decreased by 52 per cent post-intervention. Statistically, the difference in careless shots pre- and post-intervention was not significant ($t(5) = 2.47$, $p = .06$), although a large effect size (ES = 1.37) was demonstrated. Besides an objective improvement in performance, the participant reported an improvement in performance attributes post-intervention. Enhanced pre-shot concentration was evident post-intervention although this conclusion should be tempered with appropriate caution given the number of overlapping data points. Statistically the improvement was not significant ($p = .07$) although the magnitude of the difference (ES = -1.36) suggests that the improvement was of practical significance to the performer. For motivation and post-shot concentration particularly, the effect was immediate and there were few overlapping data points pre- to post-intervention. Practically significant improvements post-intervention were exhibited for all performance attributes (see Table 1). In addition, statistically significant improvements were demonstrated for motivation ($t(5) = -5.59$, $p = .003$), and post-shot concentration ($t(5) = -12.42$, $p = .001$).

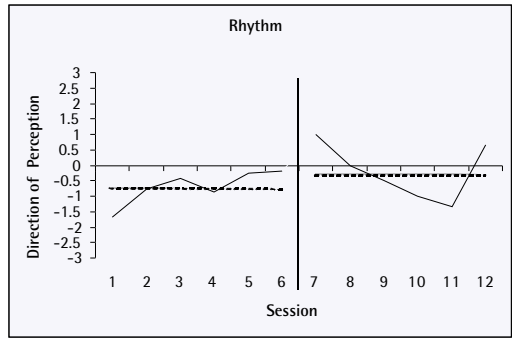
The intervention generally did not achieve a marked reduction in the intensity of the participant's emotional state (see Table 1), with mean scores remaining similar, or in some cases increasing marginally

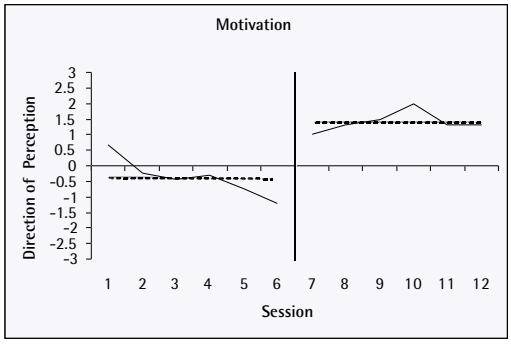
[2]Serial dependency is a property of single subject studies whereby sequential responses by the same participant will be correlated (Ottenbacher, 1986). Because t-tests assume that each data point is independent, it would only be appropriate to use a t-test in situations where the data are not serially dependent. To determine if data was serially dependent an autocorrelation coefficient was calculated for each of the dependent variables and Bartlett's test was used to determine if the autocorrelation coefficient was significant (Ottenbacher, 1986). Using this approach, it was calculated that serial dependency existed when the autocorrelation coefficient was above 0.82.

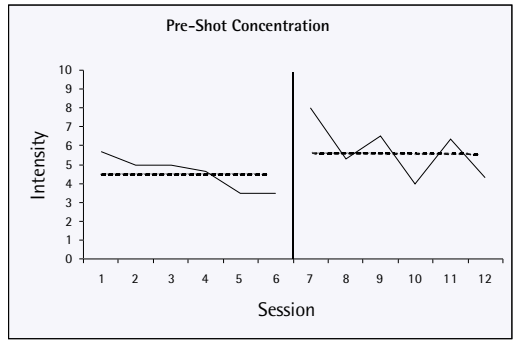
[3]Although a number of different approaches have been proposed to calculate effect size, the method suggested by Kazis, Anderson and Meenan (1989; cited in Hevey & McGee, 1998) was employed. Given the sometimes large variability observed in the baseline data of the present study, this was considered the most conservative estimate of effect size. Specifically, increases in standard deviations of baseline data decrease the estimated effect size for equivalent mean scores.

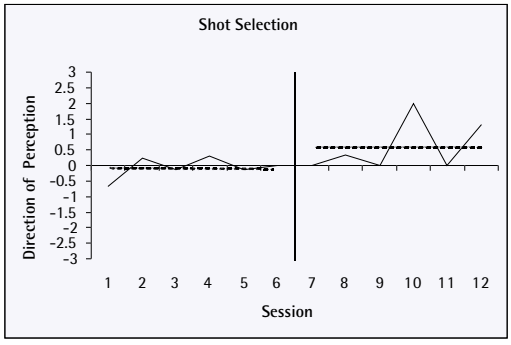
Figure 1: Performance attributes pre- and post-intervention

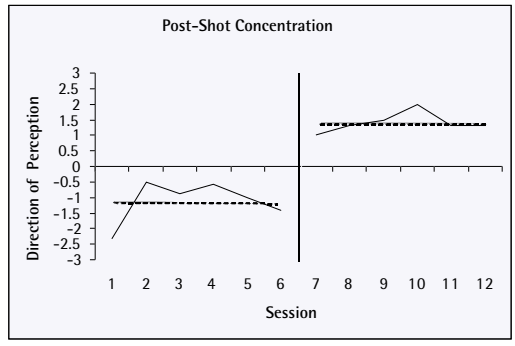


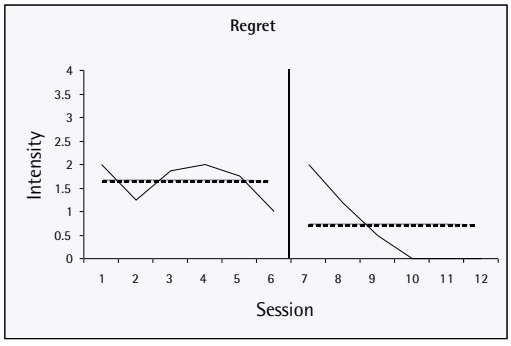












post-intervention (anxiety, disappointment). Support for this contention was given further credence by the number of overlapping data points and the absence of an immediate post-intervention effect. Two exceptions to this trend were evident however, with regret (ES = 2.46) and embarrassment (ES = 0.60) demonstrating practically significant reductions post-intervention. No statistically significant changes in emotional state pre- to post-intervention were demonstrated ($p > .003$).

The consultant evaluation form indicated that the participant was extremely satisfied with the intervention he received: the impact of the intervention was rated positively (rated 5 on a scale of 1 to 5) and the manner in which the intervention was delivered was also regarded positively (rated no less than 8 on a scale of 0 to 10). In an e-mail twenty four months after the intervention, the participant reported the following:

> *'All is going well for me – my golf game remains in good shape and thinking/focus/ decision making is getting clearer all the time (particularly in competitive/pressure situations) thanks to the "see it, feel it, do it" stuff that we worked on all that time ago…'*

This e-mail indicated that the participant was able to incorporate all aspects of the extended pre-shot routine (verbal cues, kinaesthetic imagery) into his competitive performance.

Discussion

This study examined the use of a cognitive-behavioural intervention to (a) enhance the participant's concentration immediately preceding a shot, and (b) facilitate the participant's capacity to cope adaptively when a careless shot was committed. In support of previous research (Boutcher & Zinsser, 1990; Lobmeyer & Wasserman, 1986), this study demonstrated a perceived improvement in the participant's pre-shot concentration, which was accompanied by a practically significant reduction in the frequency of careless shots post-intervention. Although the former observation was less clear-cut (several overlapping data points), because the participant's pre-shot concentration was only assessed on those shots he perceived to be careless (of which there were fewer post – intervention), the magnitude of any change in concentration pre- to post-intervention is likely to be reduced.

Results also suggest that the intervention was partially effective in assisting the participant cope adaptively with the occurrence of careless shots. Specifically, concentration and motivation after an error were both significantly and practically enhanced post-intervention. Redirecting attention to task-relevant cues can be considered an emotion-focussed coping strategy, while enhanced motivation may reflect problem-focussed talk (Holt & Hogg, 2002) rather than attempts to deal directly with the error (e.g. modifying technique). With the exception of regret, there was little pre- to post-intervention change in the intensity of the participant's emotional state. Although a more sensitive analysis, incorporating an assessment of emotion intensity *and duration* may have been beneficial in retrospect (cf. Beck & Fernandez, 1998), to account for the reduction in the intensity of some emotions but not others, one is drawn to characteristics that may distinguish between these emotions. One explanation may concern characteristics of the appraisal process, particularly the concept of intuitive and reflective appraisals (Vallerand, 1987). Regret is experienced when people look back on bad decisions (Zeelenberg et al., 2002), and may therefore be characterised by a reflective appraisal process. Recognising that appraisal of stimuli may occur at different speeds and levels (conscious through to unconscious), it may be speculated that appraisals associated with emotions such as anger and disappointment may be characterised by rapid and unconscious 'intuitive' appraisals when compared to regret. Cognitive interventions may be more effective at changing athletes' conscious, rather than unconscious appraisal processes (see Jones, 2003).

Despite the positive perception of the intervention reported by the participant, it remains possible that changes in the dependent variables may be attributable to circumstances other than the intervention itself given that the intervention was an AB design. Nevertheless, by assessing a range of psychological and performance attributes thought to mediate performance outcome, the present study extends current literature examining the efficacy of cognitive behavioural interventions to assist athletes in their ability to cope with errors and emotions. More importantly it shows how a pre-shot routine can help an individual reduce the frequency of careless shots. Collectively, results suggest that the intervention was effective in helping the participant cope adaptively with errors. Further research examining the impact of pre-performance routines on a range of both performance and psychological outcomes in sport is necessary to enhance the evidence base upon which applied practitioners can draw. Moreover, with athletes often performing under the scrutiny of colleagues, media and the public, recommendations to help athletes cope, especially with errors which may have important consequences (e.g. missing a penalty), may be informed by knowledge accrued in domains which possess similar characteristics, such as medicine.

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Context and physical activity: The influence of others

Albert V. Carron & Shauna M. Burke

The purpose of this article is to review six sources of evidence that might provide insight into what context (e.g. alone versus with others) ought to be emphasised in the promotion of physical activity. In summary, the review of these sources contributes to six conclusions: (a) adults and university students prefer to exercise with others but outside of a structured class setting, although adults also equally prefer to exercise completely alone; (b) context does not appear to play a large role in the propensity to meet recommended guidelines for aerobic physical activity; (c) theoretical propositions support social contexts as superior to individual contexts; (d) adherence to physical activity programmes is superior in social contexts; (e) social support is a strong correlate of sustained physical activity; and (f) protocols adopted in other areas attempting to promote behavioural change suggest that social contexts are superior.

PRACTICALLY every article examining concomitants of physical activity starts by enumerating the psychological and physiological benefits; these are substantial. Included among the former are reduced state and trait anxiety, reduced depression, improved cognitive functioning, improved self-esteem (particularly in children and older adults), enhanced mood states, and improved reactivity to stressors (Carron, Hausenblas, & Estabrooks, 2003). The physiological benefits of physical activity are equally impressive across the various body systems including the skeletal system (e.g. increased bone density), the cardiovascular system (e.g. reduced blood pressure), the respiratory system (e.g. enhanced ventilatory diffusion efficiency), the muscle system (e.g. hypertrophy), and the metabolic system (e.g. reduced body weight) (Haskell, 1994).

These same articles then typically point out the rather low rates of involvement in physical activity in countries around the world (see Caspersen *et al.*, 1994 for an overview) and/or the difficulty in retaining individuals once they begin a programme (i.e. approximately 20–50 per cent of adults who begin a programme withdraw within the first 6 months (Dishman, 1988; Oldridge, 1984; Ward & Morgan, 1984). Thus, the question of what protocols ought to be emphasised to stimulate the nonactive and retain the active is of ongoing importance to sport and exercise scientists and health professionals worldwide. One fundamental – and relatively understudied – consideration pertaining to any protocol aimed at increasing physical activity is the *context* that ought to be emphasised.

The most common contexts for physical activity are either *group-based* (e.g. structured classes) or *individually-based* (e.g. programmes at home) (Iverson *et al.*, 1985). This contextual distinction can be made regardless of the setting of intervention. For example, a health-care system could offer group-based educational classes or individual counselling for physical activity. Similarly, a worksite could offer an individually targeted internet intervention or regular fitness classes to promote physical activity. Which of these two basic contexts is superior in terms of individual adherence to physical activity programmes has been the focus of considerable research attention with resulting differences of opinion (Atienza, 2001; Carron, Hausenblas, & Mack, 1996; Dishman & Buckworth, 1996; King, Haskell, Taylor, Kraemer & DeBusk, 1991).

The purpose of the present paper is to review six sources of evidence that might provide insight into what context (e.g. alone versus with others) ought to be emphasized in the promotion of physical activity. These

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six sources of evidence include (a) empirical analyses of *individual preferences* for physical activity contexts, (b) an empirical analysis of the relationship between physical activity context and the *propensity to meet guidelines* advocated by the Centers for Disease Control and Prevention/American College of Sports Medicine (CDC/ACSM) to achieve health benefits, (c) propositions emanating from *theory*, (d) empirical analyses of the relationship between physical activity context and individual *adherence behaviour*, (e) empirical analyses of the role of social support on adherence behavior, and (f) the *protocols emphasised in other areas* where behavioural change is desired. Following the presentation of each of these, a concluding section containing generalisations supported by the evidence is provided.

Individual preferences

An individual's preference plays an important role in physical activity enjoyment. For example, Daley and Maynard (2003) reported that physically active adults given a choice of aerobic exercise modes (e.g. treadmill running, rowing ergometry, stair climbing) experienced lower negative affect from pre- to post-activity compared to participants who were given no choice. Also, Parfitt and Gledhill (2004) found that low-active adults in a high-preference condition (i.e. they participated in their *first* choice for aerobic activity) reported lower perceived exertion and greater positive affect than participants in the low-preference condition (i.e. they participated in their *third* choice).

Analyses of preferences for exercise *context* have focused on both adults (30+ years) and university students (19–25 years) and provided different patterns of findings. Thus, it is useful to study the data from these two populations separately.

Adults

Mills *et al.* (1997) asked older adults ($n = 98$; mean age = 76 years) in a health-promotion programme to indicate what was more appealing – exercising in an organised group/class with a leader or exercising on their own. Exercising alone was slightly preferred (34 per cent) to exercising in an organized group/class (28 per cent), and 39 per cent endorsed both contexts equally.

In a community-based survey, Wilcox *et al.* (1999) tested a substantially larger sample ($n = 3305$) of participants categorized as older adults (55–64 years) and middle-aged adults (50–54 years). Responses to a question similar to the one used by Mills *et al.* (1997) indicated that exercising alone was preferred by a substantially greater number of both middle-aged (69 per cent) and older adults (67 per cent).

Two other studies often cited in support of older adults' preferences for exercising alone are by Iverson *et al.* (1985) and King, Taylor, Haskell and DeBusk (1990). However, Iverson et al. reported on physical activity *practices* not *preferences*. In the King *et al.* study of workplace physical activity, employees were asked to indicate how likely they were to engage in physical activity in different contexts (i.e. on one's own, with others, at home, at the workplace). Although the dominant choice was physical activity on one's own rather than in a group or class, given that 'likelihood' was the factor queried, it is uncertain whether the results reflected situational *exigencies* or individual *preferences*.

Burke, Carron, and Eys (2005a) took a slightly different approach in their study of a sample ($n = 220$) of adults between the ages of 30 and 60. Burke *et al.* reasoned that it is possible for aerobic activities to be carried out in other group settings (e.g. with friends) outside of a structured class environment and that exercising completely alone (e.g. riding an exercise bike in one's basement) represents a different psychological context than exercising alone but in the company of others (i.e. jogging on a treadmill at a fitness club). Thus, when they asked respondents 'in which situation would you *most* prefer to participate in an aerobic activity?' four response options were offered: in a structured aerobics class; with other people but *not* in a structured class; on your own in

an exercise setting; and completely alone. Similarly, when participants were asked to select their *least* preferred context, these same four response options were offered.

As the results in Table 1 show, for females, exercising with others outside of a structured class setting was identified as their most preferred context (29.5 per cent), followed closely by exercising completely alone (28.8 per cent) and in a structured class (26.6 per cent). Interestingly, female adults also identified exercising in a structured class as their *least* preferred context (51.8 per cent). For males, two contexts were identified as most preferred – exercising with others outside of a structured class setting (38.8 per cent) and exercising completely alone (38.8 per cent). Male adults also identified exercising in a structured class as their least preferred context for aerobic activity (65.0 per cent).

University students

Burke, Carron and Eys (in press) conducted a similar study using a sample ($n = 601$) of undergraduate students (19–25 years). That is, participants were asked to identify their most and least preferred contexts for aerobic activity from the same four response options listed above. As the results in Table 2 show, for females, exercising with others outside of a structured class setting was the most preferred context (39.8 per cent), and exercising completely alone was the least preferred (43.5 per cent). For males, exercising with

Table 1: Contexts most and least preferred by adults for engaging in aerobic physical activity (adapted from Burke *et al.*, 2005)

Context	Percent of females indicating MOST preferred	Percent of females indicating LEAST preferred	Percent of males indicating MOST preferred	Percent of males indicating LEAST preferred
Structured class	26.6	51.8	6.3	65.0
With others outside of a structured class	29.5	10.8	38.8	6.3
On your own in an exercise setting	15.1	10.8	16.3	6.3
Completely alone	28.8	26.6	38.8	22.5

Table 2: Contexts most and least preferred by university students for engaging in aerobic physical activity (adapted from Burke *et al.*, in press)

Context	Percent of females indicating MOST preferred	Percent of females indicating LEAST preferred	Percent of males indicating MOST preferred	Percent of males indicating LEAST preferred
Structured class	26.1	27.9	3.0	78.7
With others outside of a structured class	39.8	13.3	54.8	1.6
On your own in an exercise setting	24.6	15.3	21.8	4.8
Completely alone	9.5	43.5	20.4	14.9

others outside of a structured class setting was also the most preferred context (54.8 per cent), while exercising in a structured exercise class was the least preferred (78.7 per cent).

Propensity to meet CDC/ACSM guidelines for physical activity

In 1995, the CDC/ACSM proposed that adults should accumulate '30 minutes or more of moderate-intensity physical activity on most, preferably all days of the week' (Pate *et al.*, 1995, p. 403) in order to achieve the health benefits associated with physical activity. A question of interest addressed here is whether physical activity context is associated with the likelihood that individuals will meet the CDC/ACSM guidelines.

Burke, Carron, and Eys (2005b) recently examined this question. Males ($n = 196$) and females ($n = 398$) completed a self-reported physical activity questionnaire pertaining to the frequency, intensity and duration of their activity in the four contexts outlined previously – a structured class setting, with others outside of a structured class, alone but in an exercise environment (e.g. fitness club), and completely alone. The results revealed a positive relationship between the percentage of students meeting the CDC/ACSM guidelines and the number of contexts in which physical activity was undertaken. Only a small percentage (9.9 per cent) of participants meeting the guidelines were active in a single context (i.e. only one context out of a possible four), with the majority of those (5.9 per cent) engaging in physical activity with others outside of a structured class setting. A larger percentage (28.9 per cent) were active in two contexts, while the majority (61.2 per cent) of participants meeting the guidelines were active in three or more contexts.

Theoretical considerations

There are two psychological theories that relate directly the question of which context (i.e. alone versus with others) is superior for physical activity. One of these is self-determination theory (Deci, 1992; Deci & Ryan, 1985, 1991). Basic to the theory is the assumption that the various *goals/motives* that individuals have for an activity are interpreted in terms of the degree to which they satisfy three psychological needs. These needs are (a) *autonomy* (a desire to be self-initiating in the regulation of personal behaviour), (b) *competence* (a desire to interact effectively within the environment), and (c) *relatedness* (a desire to feel connected to others). It is proposed (and research evidence supports the proposition) that when perceptions of autonomy, competence and relatedness are high, intrinsic motivation is facilitated. In turn, when intrinsic motivation is high, individual affect is positive and individual adherence is superior. Thus, self-determination theory would support the suggestion that social contexts are inherently superior to solitary contexts.

A second theory that bears on the question of context for physical activity was advanced by Baumeister and Leary (1995). They proposed that the *need to belong*, the desire for interpersonal attachments is a fundamental human motivation, and that

> *satisfying this drive involves two criteria: First, there is a need for frequent, affectively pleasant interactions with a few other people, and, second, these interactions must take place in a context of a temporally stable and enduring framework of affective concern for each other's welfare. Interactions with a constantly changing sequence of partners will be less satisfactory than repeated interactions with the same person(s), and relatedness without frequent contact will also be unsatisfactory. A lack of belongingness should constitute severe deprivation and cause a variety of ill effects. Furthermore, a great deal of human behavior, emotion, and thought is caused by this fundamental interpersonal motive. (p. 497)*

A brief note is important here. It is, of course, an extension of Baumeister and Leary's propositions to suggest that being physically active in a structured exercise class or running on a treadmill at a fitness center (but surrounded by other exercisers) satisfies the need to belong. Conversely, however, it is not hyperbole to suggest that humans

readily seek to establish social bonds. These social bonds, as Baumeister and Leary pointed out, are established relatively easily. In support of this point, they cited the work of Tajfel and his colleagues (e.g. Tajfel, 1970) with minimal groups (i.e. participants assigned to categories on the basis of some trivial criterion immediately display in-group favoritism), the work of Bowlby (1969) with infants (i.e. strong attachments to caregivers are formed well before the infant is able to calculate benefits or communicate), and the study of cohesion by Festinger *et al.,* (1950) in a housing development (i.e. physical proximity was a major catalyst for relationship formation).

Individual adherence

Over the past 10 years, a series of meta-analyses have provided insight into the issue of the relationship of context to adherence in physical activity. In 1996, Dishman and Buckworth empirically synthesised the results from 127 studies containing approximately 131,000 participants who were targeted with physical activity interventions in community, school, worksite, home and health care settings. Interventions delivered to *groups* (i.e. in a group setting) yielded much larger effects ($r = .75$) in comparison to interventions delivered to *individuals* (i.e. one-on-one, with little contact from other participants; $r = .16$), to the *family* (i.e. with individual family members and/or an entire family; $r = .05$), and to *individuals within a group* (i.e. participants receiving individual attention in addition to participation in group activities; $r = .04$).

Also in 1996, Carron, Hausenblas and Mack conducted a meta-analysis (involving 87 studies with 49,948 participants) to quantify the effect of social influence (in the form of important others, family, class leaders, co-exercisers, and groups characterised by higher social or task cohesiveness) on exercise adherence. They found support for the Dishman and Buckworth (1996) conclusion that exercising with others was superior for adherence in comparison to exercising alone (effect size of .32). Also, Carron and his associates found that participation in classes characterised by higher task cohesiveness (i.e. the primary outcome of team building strategies) or higher social cohesiveness was superior to participation in standard exercise classes (effect size = .62 and .25 respectively).

More recently, in a third review, an entirely different conclusion was reached. Van der Bij *et al.,* (2002) examined 38 studies that included 57 physical activity interventions and a combined sample of 16,403 participants (older adults with an average sample population age of ≥50 years). They concluded that participation rates in home-based and group-based interventions were small, comparable and relatively short-lived.

Finally, Burke, Carron, Eys, and Estabrooks (2005) conducted a meta-analysis where the intervention contexts were categorised according to whether they were home-based alone (i.e. home-based conditions with no contact from researchers and/or health professionals), home-based with some contact from researchers and/or health professionals, standard exercise classes, and exercise classes where group-dynamics principles were used to increase cohesiveness ('true groups'). Their analyses of 44 studies containing 4,578 participants showed that adherence was superior for true groups versus standard exercise classes (effect size = .74), only minimally better for standard classes versus home-based programmes with some contact (effect size = .09), and superior for standard classes versus home-based alone interventions (effect size = .80). (No comparisons of home-based programmes with or without contact from researchers and/or health professionals were located.)

Social support

We did have reservations about the inclusion of social support in any discussion of the role of social context. It is possible, for example, to be physically active alone, in a home gymnasium, but with the support of important others such as family and friends. Thus, as a caveat, we would like to acknowledge that the social support literature only provides indirect evidence in any discussion on the

role that context might play in involvement in physical activity.

Having stated this, however, work from our laboratory does show that the support of others does have a major role to play. The meta-analysis carried out by Carron *et al.* (1996), and introduced in the previous section on adherence, showed that social support from family and important others is related to *cognitions* about physical activity, *affect* associated with physical activity, and *adherence* behaviour itself.

Insofar as cognitions are concerned, Carron *et al.* (1996) reported moderate effect sizes (ES) between intention to be physically active and social support from family (ES = .49) and important others (ES = .44). They also reported a moderate effect between social support and efficacy for physical activity (ES = .40).

Insofar as affect is concerned, the relationships are even stronger. Carron *et al.* reported moderate relationships between affect associated with physical activity and social support from family (ES = .59) and important others (ES = .63).

Finally, Carron *et al.* (1996) reported small to moderate relationships between social support and behaviour. For example, support from family has a small relationship with adherence (ES = .36) and a moderate relationship with compliance (ES = .69). Also, social support from important others has a moderate relationship with adherence (ES = .44).

Protocols adopted to promote behavioural change

Many human behaviours falling under the rubric of addictions, compulsions, or dependencies are socially inappropriate and/or personally destructive. Often, these behaviours are so ingrained that the individual comes to the conclusion that behavioural change cannot be achieved without professional help.

A lack of physical activity certainly cannot be considered an addiction or compulsion. Nonetheless, it does share a common dilemma for health-care professionals – effecting long-term behavioural change is a considerable challenge. Thus, it seems useful to examine the protocols typically adopted by agencies promoting behavioural change in other areas.

Such an examination shows that group support is a foundation for the overwhelming majority of behavioural change programmes. For example, the following identical mission statement has been adopted by Gamblers Anonymous (http://www.gamblersanonymous.org/about.html), Cocaine Anonymous (http://www.ca.org/), Marijuana Anonymous (http://www.marijuana-anonymous.org/), Debtors Anonymous (http://www.debtorsanonymous.org/), Sexaholics Anonymous (http://www.sa.org/), and Sexual Compulsives Anonymous (http://www.sca-recovery.org/):

> *A fellowship of men and women who share their experience, strength, and hope with each other so that they may solve their common problem and help others to recover.*

Also, the reliance on a group-oriented approach is evident in other organisations. Terms such as *fellowship, group meetings* and a *group approach* and/or the suggestion of *mutual benefit and support* are included in the mission statements of such organizations as Gamblers Anonymous (UK) (http://www.gamblersanonymous.org.uk/), Al-Anon/Alateen (http://www.al-anon.alateen.org/), Nicotine Anonymous (http://www.nicotine-anonymous.org/), Emotions Anonymous (http://www.emotionsanonymous.org/), Co-Dependents Anonymous (http://www.codependents.org/), Overeaters Anonymous (http://www.oa.org/), and Recovering Couples Anonymous (http://www.recovering-couples.org/). Clearly, a wide variety of agencies focused on behavioural change in problematic areas believe in the efficacy of group support.

Discussion and conclusions

The purpose of the present paper was to review six sources of evidence that might provide insight into what context (e.g. alone versus with others) ought to be emphasised

in the promotion of physical activity. The conclusions emanating from these sources of evidence vary slightly.

First, insofar as the question of individual preferences for physical activity context is concerned, age seems to have a moderating influence. The results of Mills *et al.* (1997) suggest that the preferences of adults in their mid-70s for exercising on one's own versus in a structured class are somewhat mixed. The results of Wilcox *et al.* (1999), however, indicate that an overwhelming percentage of adults in their late 40s prefer to exercise on their own. Finally, our work (Burke *et al.*, 2005a) with adults ages 30 to 60 show two context preferences for aerobic activity – exercising with others outside of a structured class setting and exercising completely alone. It is tempting to suggest that the preference for exercising alone in older adults might be associated with self-presentation concerns and or diminished opportunities for social contact with others with similar interests but the underlying reasons for the results await further research.

Younger adults – university-aged individuals – prefer being with others. Having said this, however, our research (Burke *et al.*, in press) shows that structured class settings are rated as least favourable by male students (despite the presence of others). Both male and female university students rate exercising with others outside of a structured class setting as most preferable. It is interesting to note that female students rate exercising completely alone as *least* preferable, whereas male and female adults prefer this context (in addition to exercising with others outside of a structured class). The underlying reasons for university females' dislike for and adults' apparent preferences for solitary activity should be explored.

Second, context does not appear to play a large role in the propensity to meet the guidelines for physical activity recommended by the CDC/ACSM. Our research (Burke *et al.*, 2005b) shows that if male and female undergraduate students satisfy the CDC/ACSM guidelines for physical activity in a single context, it is likely that context will be with friends outside of a structured class setting. However, the largest percentage of individuals meeting the CDC/ACSM guidelines do so in a variety of contexts. Whether this reflects exigency (i.e. friends are unable or unwilling to exercise as frequently) or a need for variety or some other underlying motive should be explored.

Third, a tenet of self-determination theory is that humans have a need for relatedness – to connect with others. Also, Baumeister and Leary (1995) have proposed that humans have a fundamental need to belong – to form interpersonal attachments with others. Both of these theories lend support to a suggestion that being physically active in the company of others is superior to being physically active alone. Indeed, both adults and university students have expressed a preference for exercising with others (outside of a structured setting; Burke *et al.*, in press; 2005a), and research has also shown that interacting with others in a *meaningful* way (i.e. via the use of various group-dynamics principles) is associated with increased adherence to physical activity classes (Carron et al., 1996).

Fourth – as mentioned above – meta-analyses generally support a conclusion that adherence to physical activity programmes is superior in social contexts. However, the work of Van der Bij *et al.* (2002) does raise the question of whether age may have a moderating influence. As was pointed out above, Van der Bij *et al.* found that solitary and group-based interventions were similar in that they had a similar minimal impact of short duration.

Fifth, although the evidence associated with social support is indirect at best, it is very consistent. Social support from others has moderate effect on cognitions about exercise and affect associated with exercise, a small to moderate effect on adherence behaviour and a moderate effect on compliance behaviour.

Finally, protocols adopted in other areas attempting to promote behavioural change lend support to a conclusion that social contexts are superior to solitary contexts in terms of successfully effecting behavioural change.

The bottom line? There is considerably more evidence supporting a conclusion that individuals ought to make physical activity a social enterprise than there is evidence supporting a conclusion that going it alone is effective in either the short or long term.

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Sport psychology consulting with athletes with disabilities

Jeffrey J. Martin

Athletes with disabilities, like all athletes, can benefit from working with sport psychology professionals. My goal in the present article is to update and expand upon my (1999) paper describing a human development model of psychological skills training. I present research findings and recommendations within the above conceptual framework based on three related categories of psychological skills and methods, along with unique considerations for working with athletes with disabilities. First, I discuss foundation skills such as the development of self-determination and self-esteem. Then, I present information on traditional performance skills and techniques like goal setting and anxiety management. Finally, I provide a review of facilitative factors that impact on performance and quality of life such as coaching quality and injury awareness.

'You've got to keep your mental attitude positive all the way . . . even if you think a little negatively, your just toasted. Once the water temperatures get colder, you have to have a really strong attitude to carry on. Believe it or not, you have to ignore the cold water. And that's very hard to do with a negative attitude – with every stroke your probably thinking, Damn, this is cold water! You're not supposed to do that! Your supposed to be thinking, Don't worry it'll only be a few more hours.'

THE ABOVE quote is from Carlos Costa (Bendall, 2004), a bilateral amputee marathon swimmer, who became the youngest person (20 years old) to swim across Lake Ontario (Canada) in 1993. His quote clearly illustrates the importance he placed on the mental challenges of his performance. More specifically he cites his upbeat attitude, concentration ability, positive self-talk, and thought control skills as all critical mental factors that contributed to his success. In the early 1990s sport psychologists began to note the importance of psychological skills training (PST) for athletes with disabilities (Asken, 1991; Clark & Sachs, 1991). The sentiments of these authors have recently begun to be substantiated by athletes with disabilities who have acknowledged their receptiveness to sport psychology consultants (Page *et al.*, 2001). The writers of many of these early publications, however, emphasised the use of mental skills for performance enhancement purposes (e.g Clark & Sachs, 1991; Hanrahan, 1998) or very broadly defined psychological skills and inferred mental skill development from mood state scores (e.g Henschen *et al.*, 1992). Few sport psychologists, however, have explicitly emphasised personal development in combination with optimizing athletic success (Martin, 1999a). The purpose of the current article is to update and expand Martin's (1999a) article which addressed the above shortcomings. The theoretical framework for this article is Vealey's (1988) human development model of PST, which revolves around foundation skills, psychological skills and methods, and facilitative factors.

Foundation skills

Vealey's (1988) model emphasises the importance of developing self-determination, self-awareness, and self-esteem because the value of developing such positive characteristics is important for personal growth and performance (Vealey, 1988).

Self-esteem

Self-esteem is a critical component of mental health (Rosenberg, 1979), and life adjustment (Sonstroem, 1997). Sport is more likely to influence physical self-esteem

compared to global self-esteem (Whitehead & Corbin, 1997). Researchers have indicated that athletes possess adequate self-esteem (Hutzler & Bar-Eli, 1993; Martin, 1999a) and that sport participation contributes to enhanced self-esteem (Greenwood *et al.*, 1990). Sport psychologists should be familiar with the literature on self-esteem development in sport (e.g Whitehead & Corbin, 1997) and not neglect this important part of mental health.

Self-determination

Self-determination refers to people's ability to manage their own lives. Sport can be a vehicle for self-determination because individuals with disabilities often report feelings of powerlessness (Asch, 1986). Disability sport can be an effective avenue for developing confidence (Greenwood, Dzewaltowski, & French, 1990) and enhancing friendships (Martin & Mushett, 1996; Martin & Smith, 2002), especially for females.

Hutzler (1990) found wheelchair athletes reported greater functional independence derived from increased confidence and self-esteem, and perceptions of social acceptance, as a result of sport participation. Hutzler (1990) concluded that increased physical ability and enhanced confidence led to empowerment. Sport can promote self-determinism through increased confidence in interpersonal, functional, and sport skills (Ashton-Shaeffer *et al.*, 2002). Hanrahan (in press) urges sport psychologists to simply ask athletes what psychological methods or techniques have worked for them. While Hanrahan's advice is framed as a 'practical consideration' it is important to note that such an approach is also consistent with the development of self-determination and independence.

Self-awareness

Self-awareness is self-knowledge of one's feelings, thoughts and behaviours (Ravizza, 1998). Helping athletes develop self-awareness of what motivates them can lead to personal growth. Athletes with disabilities may have particularly complex motivations. For instance, athletes may use sport to adjust to their disability (Kirkby, 1995), as a means of self-advocacy (Martin, 1996), to combat marginalization (Wheeler *et al.*, 1996) and to promote the disability sport movement (Asken, 1991). Athletes have reported using sport as a vehicle to be seen as normal as well as being 'beyond normal' (Wheeler *et al.,* 1996). Athletes also have typical 'athlete' motivations. For instance, cerebral palsy (CP) athletes hold both task/performance and ego/outcome goal orientations (Martin, Adams-Mushett & Smith, 1995). Social goals (Brasile & Hedrick, 1991) and aesthetic goals (Cooper, Sherrill & Marshall, 1986) are also prominent.

Athletes with disabilities may have difficulty distinguishing between pain from their disability and pain from a sport injury (Davis & Ferrara, 1995). Pain or discomfort from fatigue and exertion may also contribute to uncertainty and confusion. Ravizza (1998) suggested that having athletes monitor their physiological states can promote awareness. Helping healthy competitors learn to focus their attention on important muscle groups (e.g shoulder muscles) when relaxed and stressed, and when energised and tired, should aid athletes in understanding the differences among muscle tension/relaxation and muscle freshness/fatigue.

This awareness should help athletes distinguish between muscle tension from anxiety, muscle fatigue, disability condition, and muscle pain indicative of an injury. Reducing injury rates and time lost to injuries among athletes with disabilities is important because of their often short careers (Wheeler *et al.*, 1996) and few competitive opportunities (Steadward & Wheeler, 1996). Team and individual discussions led by the sport psychologist aimed at exploring athletes' goals should help them increase their self-knowledge.

Summary

Self-esteem, self-determinism and self-awareness are not typically viewed as directly impacting on performance. However, when viewing performance enhancement from a personal development model they are important considerations. Sport psychologists may clearly benefit their clients by being sensitive to the development of such personal qualities.

Psychological skills and methods

Researchers have suggested that athletes with disabilities use psychological skills (Martin & Mushett, 1997), would like to learn about psychological skills (Kirkby, 1995), mentally prepare for competition (Watanabe *et al.*, 1992) and have favorable attitudes towards sport psychologists (Page *et al.*, 2001). As Hanrahan (in press) urges, sport psychologists should help athletes learn to 'be in control of their own mental preparation'.

Unique challenges

Optimal levels of confidence and anxiety, and a clear task oriented focus promote superior performance (Morris & Thomas, 2004). However, sport can be an anxious experience and athletes with disabilities face unique stressors. Campbell and Jones (2002a) for instance found elite wheelchair athletes experienced stressors such as pressures sores and the financial costs of their wheelchairs. Athletes with CP can have abnormal reflex activity during competition (Sherrill, 1998). Reliance on equipment (e.g wheelchairs), other people (e.g transportation needs) and medication also present unique challenges. For example, wheelchair athletes have to contend with poor road surfaces that impair performance and pose safety threats (Dattilo & Guadagnolo, 1988). Awareness of these challenges by sport psychologists can aid in helping athletes develop coping responses in preparation for difficulties.

Goal Setting

Athletes with disabilities can benefit from setting appropriate goals, and adherence to effective goal setting principles is recommended. Watanabe *et al.* (1992) reported that although athletes with disabilities used mental preparation, they could benefit from setting goals for training, competition, and dietary behaviours. Hedrick and Morse (1991) discussed goal setting practices for wheelchair basketball and provided a detailed feedback chart for offensive and defensive goals.

Imagery

Recent research with athletes with visual impairments indicates that imagery is useful for motivational and cognitive reasons (Eddy & Mellalieu, 2003). However, we still know little about imagery use. Hanrahan (1998, 2004) offers many useful suggestions. Athletes imaging missing limbs may get frustrated (Hanrahan, 1998) particularly if, for instance, an amputee images with the full use of all of his/her body parts (Hanrahan, in press). Surburg (1989) suggested that visuomotor behaviour rehearsal (VMBR) might be a good technique for athletes with CP because relaxation may reduce spasticity which could disrupt imagery. Imagery should focus on developing a plan for goal attainment and/or a plan for resolution of stressful events as opposed to simply imaging a successful outcome (Taylor *et al.*, 1998). Finally, depending on whether athletes became blind later in life or early in life, they may use different visual and spatial strategies in their imagery (Vanlierde & Wanet-Defalque, 2004). However, despite differences in imagery strategy, likely due to differences in visual experience, both later and early life blind participants have been found to peform equally well to sighted participants (Vanlierde & Wanet-Defalque, 2004).

Self-talk

Self-talk can be used for arousal moderation, technical proficiency, and the elimination/moderation of negative affect. First, self-talk may help athletes with disabilities moderate their arousal as, unlike physiologically based techniques, they may have more control over

cognition than body parts. For example, athletes with CP often experience uncontrollable muscle spasticity that worsens with fatigue, making muscular relaxation difficult. Deep breathing may prove difficult for athletes without use of their abdominal muscles although, surprisingly, Hanrahan (1998, 2004) found deep breathing for relaxation effective for athletes with no use of their abdominal muscles. Second, self-talk can be used for correct technique and to promote visual images of correct movement (Webber *et al.*, 1997). Hutzler (1992) derived 12 cognitive strategies related to wheelchair tennis that could be used for self-talk. Finally, Sherrill (1997) suggested that athletes with disabilities may be overly self-critical. Wheeler *et al.* (1996) also reported that wheelchair users with multiple sclerosis were self critical. Henschen *et al.* (1992) indicated that over a four month PST programme, nine Paralympic wheel-chair basketball team members became less self-critical. Thus, self-talk may be helpful in negating self-critical cognitions. Consistent with the human development model, Perry and Marsh (2000) urged sport psychologists to use overt self-talk as a window into athlete's self-esteem.

Competition plans

Athletes with disabilities often need to anticipate difficulties. Dealing with equipment problems and facing unanticipated travel barriers that add additional travel time (e.g lack of wheelchair ramps), all necessitate careful planning. At a world class road race wheelchair athletes missed their race because they were unable to find an empty elevator from their upper story rooms. Sport psychologists need to help athletes incorporate these types of considerations into pre-competition plans. Hedrick and Morse (1993, 1995b) provided wheelchair specific precompetition and competition plans for focusing and refocusing and anticipating critical situations.

Summary

Athletes with disabilities can use traditional psychological methods to develop psychological skills. Sport psychologists who understand the challenges of disability sport will enhance their ability to assist athletes in their PST. Finally, sport psychologists who work with teams will find that Hanrahan (2004) provides an excellent discussion of group work with athletes with disabilities.

Facilitative factors

Factors outside of competition and training such as travel (Davis, 1988), nutritional practices (Williams & Devlin, 1992), sleep habits (Savis, 1994), and retirement issues (Martin, 1996), can affect performance. In this section, important considerations in the above areas are detailed.

Injury and illness

Despite the fitness benefits of sport, injuries occur (Davis & Ferrara, 1995). To achieve success it is important to remain injury-free (Laskowski, 1994). Compared to able-bodied athletes, however, athletes with disabilities lose more training time due to injury (Davis & Ferrara, 1995). Many injuries involve damage to the shoulders and hands (e.g carpal tunnel syndrome; Burnham, Newall, & Steadward, 1991). Training time is also lost to disability-related illness (e.g bladder infections) and injury (e.g pressure sores). It is also important to understand the increased risk of heat exhaustion and related outcomes (e.g heat stroke) for athletes with spinal cord injuries (SCI). SCI athletes have difficulty regulating body temperature, particularly when competing in high temperatures (McCann, 1996).

Sport psychologists should be aware of sport and disability type that may predispose athletes to particular injuries. Should a client become injured it is important that sport psychologists are familiar with the psychology of injury and disability sport injury literature (Davis & Ferrara, 1995) in order to provide competent service to their clients.

Travel challenges

Traveling to competition sites for extended periods of time often means not being able to give or receive emotional support which can cause stress. Stress can clearly disrupt concentration and impact performance (Campbell & Jones, 2002a, 2002b). Furthermore, travel-related relationship issues may be viewed negatively (i.e., threatening vs. challenging) and quite severely compared to other sources of stress (Campbell & Jones, 2002a, 2002b). Travelling across time zones, trying to understand foreign languages, and enduring different climates (e.g excessive heat and humidity) all take a toll on individual's emotional and physical resources (Banks, 1992). Finally, at major competitions such as the Paralympics, athletes often cannot practice at the competition site. In such cases, obtaining video tapes or even one-dimensional pictures of the competition site can faciliate imagery of the course or facility.

Effective training and competing

Athletes need intelligent coaching to achieve sport success. Research examining coaching practices in disability sport is not encouraging. Although coaches (N = 239) of athletes from the six national disability sport organisations in the USA indicated that they coached athletes on a regular basis (i.e., at least once a week), most other research is less supportive (DePauw & Gavron, 1995). For instance, only 58 per cent of 319 elite adult athletes stated that they had coaches who directed their training sessions (Ferrara & Buckley, 1996).

One-third of an international group of wheelchair racers, throwers and swimmers reported that they did not have a coach (Liow & Hopkins, 1996). Within this group swimmers were coached regularly, whereas the throwers and wheelchair racers received little coaching (Liow & Hopkins, 1996). In 1994, few wheelchair racers were reported to have coaches in the United Kingdom (Williams & Taylor, 1994) and in the USA most coaches are volunteers without a sport science background (Hedrick & Morse, 1995a). Athletes may train inappropriately regardless of whether they are coached or self-coached. Liow and Hopkins (1996) reported that many elite athletes with disabilities trained in ways that were not sport specific and they tapered poorly. Research by Watanabe *et al.* (1992) found that some athletes overtrained on recovery days, and Hedrick, Morse, and Figoni (1988) indicated athletes trained inconsistently, suggesting that athletes would benefit from improved coaching. Athletes have also reported a lack of availability of training material (Williams & Taylor, 1994) and may quit sport because of a lack of training information (Williams & Taylor, 1994).

Sport psychologists should understand their athletes' training and can help athletes obtain quality coaching and educational materials. Glucose drinks, for instance, can improve wheelchair performance (Spendiff & Campbell, 2003). Textbooks discussing disability specific coaching principles and techniques exist (e.g DePauw & Gavron, 1995; Jones, 1994; Owen, 1982; Steadward, Wheeler & Watkinson, 2003; Winnick, 2000) and *Sports 'N Spokes*, a monthly magazine, publishes sport science information about wheelchair sports (see www.pvamagazines.com/sns).

Leaving sport

Elite athletes (i.e. Paralympians) often have very brief careers (e.g two years) that start shortly after (e.g two years) an acquired disability (Wheeler *et al.*, 1996). Because of this timing, sport psychologists working with Paralympians may also find themselves assisting athletes with the transition out of sport. Acceptance and adjustment to a major trauma (e.g SCI) often takes up to two years (Wheeler *et al.*, 1996), and self-esteem stabilisation for individuals with SCI may take up to four years (Trieschmann, 1988). Thus, athletes may have to cope with their disability and with leaving sport (Wheeler *et al.*, 1996). Additionally, athletes may be dealing with a 'secondary disability'

in the form of a chronic injury (Wheeler *et al.*, 1996). A small body of literature about transitions out of sport for athletes with disabilities exists (Martin, 1996, 1999b, 2000).

Summary

Sport psychologists can increase their effectiveness by being aware that the athletes they work with may not train optimally. Issues associated with leaving sport may indirectly impact on current athletic performance as well as influence post sport quality of life. Sport psychologists familiar with these issues will be better equipped to offer quality service to their clients.

Conclusion

Athletes with disabilities have typically been underserved by professionals in sport psychology. Sport psychologists can play an important role in helping athletes with disabilities achieve personal excellence in life and sport. Similar to the challenge of being familiar with both psychological principles of athletic behaviour and the sport sciences, sport psychologists desiring to work with athletes with disabilities have the additional challenge of understanding the world of disability and disability sport in order to be effective (Sachs, 1993).

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Consultant Effectiveness in Applied Sport Psychology

A Joint BPS/BASES workshop on Consultant Effectiveness in Applied Sport Psychology will be held at Heriot-Watt University, Edinburgh, on **2 December**.

Presenters include Dr Ailsa Anderson, David Tod and Brendan Cropley. The interactive workshop will involve discussion on the current evidence on determinants of sport psychologist's effectiveness. It will also include exploration and evaluation of methods to increase effectiveness in practice.

Places are limited to 25 so you are advised to book early.

Research Note

Chickens, eggs and performance psychology: What comes first, the believing or the achieving?

Mark R. Beauchamp & Ben Jackson

Myers, N.M., Payment, C.A. & Feltz D.L. (2004). Reciprocal relationships between collective efficacy and team performance in women's ice hockey. *Group Dynamics: Theory, Research, and Practice, 8(3)*, 182–195.

OVER the past few years a growing body of research has sought to test the proposition that members' beliefs about their group's capabilities, namely *collective efficacy* (Bandura, 1997; 2000) are related to team performance. In line with this, the study by Myers, Payment and Feltz (2004) considered the notion (cf. Bandura, 1997) that collective efficacy operates both as a *predictor* as well as a *consequence* of team performance in sport. Although the very nature of this research question may not appear out of the ordinary the design, measurement and interpretative advances highlighted by this study not only provide direction for future group dynamics research, but also hold implications for other areas of enquiry within sport and exercise psychology.

As group dynamics theorists often remind us, groups are dynamic and will likely change with time (Carron & Hausenblas, 1998). Accordingly, Myers and his colleagues tracked the collective efficacy beliefs and performance data of 12 intercollegiate women's ice-hockey teams over the course of at least seven (range = 7–12) successive weekends. Over each weekend, each team played against the same opponent on consecutive days, allowing the researchers to control for previous levels of the dependent variable when examining both efficacy-performance as well as performance-efficacy relationships.

From a design perspective, one of the particular strengths of this study relates to the use of hierarchical linear modelling (Bryk & Raudenbush, 1992) to deal with data that is nested within groups. Hierarchical linear modelling, or what is also referred to as multilevel modelling (Goldstein, 1995) allows researchers to simultaneously investigate both within and across-group variability. This means that although two variables might be related across groups or teams, researchers can also begin to understand how given relationships might vary within different teams, and what might be accounting for any group-level effects. Within the broader field of *sport and exercise psychology*, a considerable amount of research is conducted using data that is embedded within groups of some kind (e.g. sports teams, school classes, and exercise groups). However, all too often researchers employ analyses that fail to take into account the interdependence that occurs when study participants exist within such groups. For example, statistical procedures such as multiple regression and analysis of variance (ANOVA) require observations that are independent of one another. If researchers fail to account for any interdependence it is possible, if not likely, that standard errors will be underestimated and spurious findings will result (Rasbash *et al.*, 2000).

From a measurement perspective, collective efficacy scores were derived using Rasch

measurement procedures (cf. Andrich, 1978; Embretson & Reise, 2000), rather than the more typical classical test theory methods. When one measures properties such as weight or distance, one can be confident that the intervals between measurement units are the same across the measurement continuum (i.e. the distance between one and two metres is the same as the distance between three and four metres). However, the same assumptions cannot be made when data is derived using rating scales, as is common practice in psychological research. Rasch measurement models enable the researcher to (a) transform data into a format commensurate with a true interval scale using logistic ratio units or 'logits'; (b) ensure that instruments tap into the full range of responses across a continuum (from high to low on a given construct); (c) identify whether new items need to be developed; and (d) know whether specific items are more easily endorsed than others. The former contribution is particularly noteworthy, as it allows researchers and practitioners to determine by how much people differ from one another on a given construct. It is beyond the scope of this research note to provide a comprehensive review of Rasch models, however, it is noteworthy that the use of Rasch analyses has been described as a genuine paradigm shift within social sciences research (Blais, 2003).

As for the study itself, the sample size at the group-level was fairly small ($n = 12$). Nevertheless, Myers and colleagues found that collective efficacy was able to explain significant variance in team performance, even after controlling for the effects of previous performance. In addition, team performance was found to explain significant variability in collective efficacy even after controlling for previous levels of collective efficacy. So to refer to the oft-used analogy of the chicken and egg (i.e. 'what comes first?'), the relationship between collective efficacy and team performance was shown to be recursive whereby each impacts on the other. This finding also has particular implications for those concerned with intervention, in so far as team performance may not only be related to past team performances, but may also be determined by the team's perceptions about its conjoint capabilities. Given that collective efficacy is a social cognition amenable to change (Bandura, 1997), the authors propose that those responsible for group development (e.g. coaches and team leaders) may be able to develop efficacy enhancement strategies to facilitate team success and prevent downward performance spirals.

The authors do not elaborate at length about what some of these strategies may be, however, such a line of enquiry lends itself nicely to future research. Team performance is also a desired outcome within many other facets of human existence (education, business, medicine). To this extent, the study findings would suggest that anyone responsible for team development should consider monitoring a team's collective efficacy beliefs over time. Clearly, if an upward efficacy-performance spiral begins to develop one should continue to foster it. However, if the spiral spins downward those responsible for intervention (e.g. coach, consultant) should be prepared to develop strategies that reinforce how the group collectively perceives its combined capabilities.

The study of efficacy beliefs in sport and exercise psychology has primarily been conducted at the individual-level (i.e. self-efficacy) rather than focusing on shared perceptions about the group's perceived capabilities. Nonetheless, given the pervasiveness of groups across so many facets of human existence, allied with Bandura's (1997) proposal that efficacy beliefs 'constitute the key factor of human agency' (p. 3), the continued study of collective efficacy would appear to be particularly necessary. The study by Myers and colleagues set out to test a reasonable proposition advanced by theory (cf. Bandura, 1997). It is perhaps not *what* they found that distinguished it from previous efficacy-performance studies, but rather *how* they tested it that is particularly

noteworthy. Indeed, the methodological and analytical advances highlighted by this study have implications that run across the whole research domain that is *sport and exercise psychology*.

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CPD Submission Reminder – Is your CPD Log up to date?

CPD is now a mandatory requirement for all Chartered Psychologists holding a Practising Certificate. From October 2005 you will be required to submit a record of your CPD to the Society, three months before the month in which your Practising Certificate is renewed (e.g., if your Practising Certificate renewal date falls in January, your CPD year will run from 1 October to 30 September, and you will be asked to submit your CPD in October 2005). The table below shows the submission times for each Practising Certificate renewal time.

Practising Certificate Renewal Date	Deadline for first submission of CPD Record
January 2006	October 2005
April 2006	January 2006
July 2006	April 2006
October 2006	July 2006

The Society has a standard format for CPD planning and recording, which is common to all divisions and supersedes any previous divisional CPD documentation that you may have been using, and this is available either online or in MS Word version. The online facility has been developed to enable you to plan and record your CPD in a secure area of the Society's website. This is intended to facilitate CPD as it is carried out and to enable you to submit a record of your CPD without further form filling. If you do not have online access, the MS Word version can be sent to you on request, via e-mail or disk.

You may remember receiving a CPD information folder in October 2004, informing you of the requirements and process – if you do not have this information to hand, you can find it on members' area of the Society website at www.bps.org.uk/cpd or can request the information in hard copy from the CPD Team at the Leicester Office.

The Division of Sport and Exercise Psychology is in the process of developing some example logs in response to member feedback and these will be posted on the CPD area of the website shortly.

If you have any queries regarding CPD, or require help with using the online system please contact the CPD Team at the Leicester Office (Tel: 0116 252 9916; E-mail: cpd@bps.org.uk). The team can provide booked telephone training sessions (around 30 minutes) to help you to start using the online planning and recording system.

Student Members

Graduate Programmes in Applied Sport Psychology

Melissa Day

THIS ARTICLE provides a review of the electronic version of the *Directory of Graduate Programs in Applied Sport Psychology* (Burke, Sachs & Smisson, 2004). Developed by the Association for the Advancement of Applied Sport Psychology (AAASP) originally as a bound book, this version of the directory provides a valuable resource of information on sports psychology programmes at both the masters and doctoral levels and associated topics, thus providing vital information for students considering postgraduate study. The main core of this electronic directory is its search facility for over 100 sport psychology postgraduate courses, which includes information on each course and contact numbers. The usefulness of this resource is then further enhanced by the many additional features it contains which relate to sport psychology and further study, including information on aspects such as career possibilities, background readings, internet resources and guidance on choosing appropriate courses. This directory can, therefore, be used as a reference point along the course of deciding further study.

The course finder offers a quick and easy method for exploring postgraduate courses in sport psychology. Courses are listed by both country and university and can be further split into type of course required. This allows prospective students with specific ideas about further study to find appropriate courses, whereas those with no formal ideas may browse through the selection of universities and courses. The directory will also be advantageous to those considering studying overseas since it contains information on international courses from Australia, Canada, Singapore, South Africa and the United States. The directory, now in its seventh edition, continues to expand with regular updates each year and is also growing in the amount of UK courses represented.

The directory also includes a great depth of information into the programmes that it lists. In similarity to other such listings, it displays essential aspects such as course details and admissions requirements, yet also provides far more detail than many other resources. Included in each listing are websites as well as key university contacts and their areas of academic interest, an essential reference for future postgraduate students who will be able to gain instant details of those with similar research interests and in many cases direct contact details. Also useful will be the information included on the average number of assistantships available, number of applicants and number of accepted candidates. This allows an insight into the demand for places of each course and the amount of competition that will be faced for entry into each programme.

For those individuals looking for universities with a specific orientation the directory also includes a programme rating, which refers to the orientation of the offered programme. Each university is given a rating that portrays whether it is research orientated, applied orientated or has an equal emphasis. This allows further choice and insight into the types of programmes offered at each university. Moreover, the directory also provides useful information such as sources of potential funding, bursaries and teaching assistantships. This information

includes the number of assistantships given each year and the percentage of students on the course with each type of assistantship.

As well as providing a useful resource for finding university courses, this directory also gives valuable advice on how to choose the correct programme. This includes a section on self-reflective questions on personal goals for further study and the type of institution that would best suit a student's needs. Following on from these questions are points to think about on viewing the university, such as accommodation, location and financial aid available. In addition, the directory suggests questions that may need to be asked about the programme under consideration, such as how students are marked, how the course is structured, which conferences students may be invited to attend, and the flexibility of the programme. This section in the directory acts as a stimulant to choosing the most suitable university and course. The suggested questions to think about while selecting a course may also help to prompt students to make the most informed decision possible. Many key points are listed, which may help an individual gather more information while deciding which course to choose.

The directory also acts as a list of reference points that students may wish to consider when choosing a pathway in sport psychology. It includes sections on journal articles, books and videos that may help in making decisions about further study. Many of the inclusions in these sections are also highly relevant to those already in further study as a guide point for future career development or student lectures. Reading lists include a vast number of texts, from general sport psychology text books to more specialised areas. Most useful is possibly the list of available sport psychology videos on issues such as using psychology in coaching and teaching mental skills. All videos listed include suppliers' contact details to enable direct contact.

Also included is a chapter on using the internet for success. This details many useful web pages for sport psychology resources and sport specific pages. It also contains information on searching for sport psychology resources on the internet. This focuses mainly on getting the most out of database searches and looking for psychological material. As such, it may be a valuable resource for assessing academic materials on the internet, and may be especially relevant to conducting literature searches. The authors discuss their personal experiences of searching for psychology literature and recommendations for the most useful sites. This section clearly shows the time involved by the authors in compiling the most useful information and relevant details for students.

The amount of information contained within the directory means that it includes everything necessary for those contemplating postgraduate study. From those debating the pathway of sport psychology to individuals with definite decisions, this directory will contain something useful for everyone. As well as providing an impressive means of student guidance, it also contains pages of useful references and information to help anyone with an interest in sport psychology. The current cost of an individual 6-month subscription to the electronic version of the directory is US$29 (and US$39 for 12 months), while the bound (paperback) version costs US$29. One advantage of the electronic version is that it is continually updated as changes are submitted. The *Directory of Graduate Programs in Applied Sport Psychology* is one of an impressive collection of electronic resources available from Fitness Information Technology (See www.fitinfotech.com), including the *Directory of Psychological Tests in the Sport and Exercise Sciences, Directory of Internship in the Sport and Exercise Sciences*, specific questionnaires (e.g., *Group Environment Questionnaire, Flow Scales*) and e-editions of books (e.g., *Counseling College Student Athletes*) which are sold in their entirely or on a chapter-by-chapter basis.

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Commentaries

Talking to the Press: III. Something worth researching?

Guy Faulkner and Sara-Jane Finlay

ONE of the aims of the British Psychological Society is to raise public awareness of psychology, and the media is one outlet for promoting psychology for the public good. Both Biddle (2005) and Jones (2005) in the first issue of *Sport & Exercise Psychology Review* highlight the importance of engaging with the press regarding our work and the potential challenges involved within these interactions. It is an important role because, as the aims of the Society reflect, the news media may play a critical role in creating public understandings of the relationship between health and physical activity. For some people, the only forum for receiving information about physical activity related research, and for coming into contact with physical activity researchers may be through the mass media. How we and our research come to the attention of the media, how it is processed by the media, and how it is then consumed by readers, viewers, or listeners, are important questions that strike at the heart of attempts at knowledge translation.

We suggest that what is currently missing in our field is a comprehensive analysis of the media that brings together journalistic agendas with understandings of how audiences receive and interpret media messages about physical activity (and by extension sport psychology) research (see Finlay & Faulkner, 2005). Media analysis can be said to occur on four levels – inception, production, transmission and reception (Fenton, Bryman & Deacon, 1998). First, the inception of the message is the process of discussion and debate involved in the formation of a communication plan. For example, what strategies are developed to formulate and widely disseminate a press release? Do such strategies need tailoring for messages about physical activity research?

At the second level, the production of the message examines the content of the message itself and the role of sources, journalists and editors. Any study considering the social construction of media texts is assessing their 'newsworthiness' or the news values that make them attractive for publication. What criteria do journalists and editors use to make judgements on the newsworthiness of a story about physical activity and related research? News values vary depending on the media outlet and the style of reporting, and as Biddle (2005) found in relating his experience, may also conflict with those of the individual or organisation attempting to get its message across.

Third, transmission of the message examines both the reach of the media, but also the impact that media outlets have on the meaning of the message. Where do stories about physical activity research appear in the media? Are different stories more likely to appear on radio, television, or in print? For instance, the inclusion of a story about physical activity in a broadsheet like *The Guardian* will not only reach a different audience than a tabloid paper such as *The Sun*, but will also inflect on the meaning of the message and the way that it is understood and consumed by the audience.

The fourth level is that of reception and the processes of meaning making undertaken by the audience in their consumption of the media message. Audience consumption research is concerned with more than simple recall, effect or exposure, but considers the

active meaning making which occurs when audience members engage with media texts. Do some members of the general public decide not to go to community gyms because they read or saw a media story that suggests that 'gyms are not the answer'? Or do they reject what they read because their experience tells them otherwise?

Researchers need to engage with media to disseminate their findings and provide informed commentary. We think that researching this process is important in its own right. A more complex analysis of the meaning construction that occurs in the initial creation and 'encoding' of physical activity messages, to their 'decoding', consumption and negotiation by the audience would be informative in developing physical activity specific communication policy for effective knowledge translation through the media. Funded by the Canadian Social Sciences and Humanities Research Council we are currently conducting such a holistic analysis of the Canadian media. We want to know, what is fit to print?

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Editor's Note

The BPS currently monitors media coverage at conferences in two ways. First, every year an analysis is undertaken of where coverage has been gained, and which stories ran from the conference. From this the Society can evaluate their targeting of news releases, identification of stories and hands-on care of the journalists who attend the conference press office. The resulting report is circulated widely within the Society. This year the Society also embarked on a wider project to examine the effectiveness and impact of its media work. This project initially included a content analysis of all of the coverage obtained last year as a result of the news releases issued. The second element was a structured interview with journalists attending the 2005 Quinquennial Conference in Manchester to find out more about their views on the Society's work, and finally, focus groups were held with lay people to examine the changes in attitudes and opinions which media coverage might induce. The project is still on-going, but results are likely to feature in the media page of *The Psychologist* when it is completed.

Beyond the dichotomous model of achievement goals in sport and exercise psychology: Comment on Elliot and Conroy (2005)

Christopher M. Spray & Richard J. Keegan

In the previous issue of *Sport & Exercise Psychology Review*, Elliot and Conroy (2005) presented a case for sport and exercise psychology researchers to move beyond the dichotomous model of achievement goals in their conceptual and empirical work. They outlined key distinctions between the dichotomous and trichotomous frameworks before introducing the more recently developed 2 x 2 achievement goal model. Theoretical advantages of the 2 x 2 framework were discussed, before concluding with applicability considerations of the framework in sport and exercise settings. Elliot and Conroy stated that the value of the expanded 2 x 2 model in these settings remains a relatively open empirical question (p. 21). In this brief article, we would like to highlight several issues that stem from Elliot and Conroy's paper, drawing from our own empirical endeavours to examine the model's value. These issues centre on a) level of analysis, b) goal climate, c) relationships among goals, and d) the mastery-avoidance goal.

Level of analysis

Elliot and Conroy (2005) stated that achievement goals have been studied at the 'here and now' level (involvement), at the dispositional level (orientation), and at the situational level (climate) (p. 17). Their article, they suggested, focussed essentially on states of goal involvement, although references were frequently made to the term 'goal adoption'. Sport and exercise psychologists will probably be less familiar with this term, as research utilising achievement goal theory has primarily examined goal orientations with some, albeit limited, attention paid to goal involvement. Goal adoption refers to moment-to-moment goals, as well as to goals that individuals may report pursuing in a specific context such as an exercise class e.g., "in my exercise class it is important to me to perform as well as I possibly can". These context-specific goals, however, are situationally and temporally specific, and are not conceived as dispositional tendencies or goal orientations. In the educational psychology literature, studies have mainly focussed on context-specific goals rather than moment-to-moment competence-relevant concerns. More work is required in both educational and physical activity settings to examine the situational dynamics that lead to momentary switches in avoidance and approach forms of achievement striving (for an example in sport, see Gernigon, d'Arripe-Longueville, Delignieres & Ninot, 2004). To avoid ambiguity, it is important that sport and exercise psychologists explicate their conceptualisation of the level of analysis of the goal construct in their research (and that they employ measurement tools consistent with this conceptualisation).

Goal climate

With respect to the level of analysis of the goal construct, Elliot and Conroy (2005) advocate the integration of the approach-avoidance distinction within investigations of situationally-emphasised achievement goals (p. 17). Current measures of per-

ceived motivational climate in sport and physical education do not exclusively focus on the promotion of competence (defined in mastery or performance terms) by significant social agents. For example, 'perceived important role' (mastery climate) and 'unequal recognition' (performance climate) are two climate dimensions that do not centre on competence explicitly. Nevertheless, we argue that these dimensions are important components of the 'perceived climate' and will influence goal adoption.

Those dimensions of climate that appear to be competence-based such as 'effort/improvement' (mastery) and 'out performing others' (performance) have been conceptualised within the definition component of competence and are primarily approach-focussed. To date, the valence component of competence has not been targeted intentionally, although closer examination of current measures reveals some avoidance-focussed elements where the concern would appear to be incompetence and its consequences (e.g., 'worry about mistakes'). Utilising qualitative procedures, we are currently examining how young athletes, coaches and parents perceive motivational climate in terms of the 2 x 2 model. This process should result in the development of measures to tap approach-avoidance elements of climate (in addition to mastery-performance elements) for each of these social agents. We hope to identify the processes by which parents, coaches and peers highlight the salience of approach-avoidance forms of competence to young people in sport. Inclusion of the valence component of competence within climate-based research will hopefully provide a more complete picture of perceived situationally-emphasised goals and associated motivational processes and outcomes in sport (and exercise).

Relationships among goals

Elliot and Conroy (2005) referred to the conceptual independence of the four approach-avoidance goals (p. 20). From an empirical perspective, the interrelationships among the four goals within the 2 x 2 model are likely to vary depending on the level of analysis (i.e., assessment of goals in relation to a specific context versus assessment of moment-to-moment goal states). The limited published research to date employing the 2 x 2 framework in exercise and sport settings reveals positive intercorrelations. Utilising the Achievement Goals Questionnaire for Sport (AGQ-S), Conroy, Elliot & Hofer, (2003) found that achievement goals sharing the same definition or valence of competence were moderately correlated. Performance-avoidance and mastery-approach goals were weakly associated, whereas performance-approach and mastery-avoidance goals were moderately positively correlated. Research in the school physical education setting reveals similar patterns (Spray, 2005). It seems, therefore, that pursuing one goal does not preclude pursuing others, at least when the goals are framed in terms of a particular activity. Indeed, it is likely that participants strive to achieve multiple goals simultaneously in sport and exercise settings because of the number and variety of possible antecedents (Elliot, 1999). However, with the exception of the investigation by Gernigon et al. (2004), we have few data that examine the *dominance* of different goals *during* the execution of a physical task.

Mastery-avoidance goal

As the 'new kid on the block', the mastery-avoidance goal is beginning to come under close scrutiny in sport and exercise psychology research. Elliot and Conroy (2005) presented some plausible examples of how athletes and exercise participants can become concerned with self- or task-referenced incompetence. As they point out, mastery-avoidance goals may be relevant in some contexts but not others (p. 20). Initial efforts to assess the four achievement goals in the physical education setting, using an adapted version of the AGQ-S, suggest that mastery-avoidance goals are endorsed by young peo-

ple (Spray, 2005). We encourage further investigations of the mastery-avoidance goal construct in different settings and with different populations. We concur with Elliot and Conroy that the ageing process may well bring about concerns with not doing worse at a physical activity than before, rather than concern with continued self-improvement or mastery of that activity. On the other hand, we suggest that a concern with not making mistakes among perfectionists may bring about somewhat different processes and outcomes because mastery-approach goals are likely to be pursued simultaneously. The combined pursuit of mastery-avoidance and mastery-approach goals is an interesting concept. Exploring the approach and avoidance elements that sport and exercise participants attach to mastery-based striving would be a useful starting point for future investigations.

In conclusion, Elliot and Conroy (2005) have provided investigators in sport and exercise psychology with new directions to follow in achievement goal research. We welcome their article and hope we have raised some pertinent issues. Addressing these issues will help to elaborate further on the explanatory value of the 2 x 2 model in sport and exercise settings.

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Challenges for the Division of Sport and Exercise Psychology: Reflections on Anderson and Lavallee (2005)

David Tod & Joanne Thatcher

THE PROFESSIONAL status of sport and exercise psychology in Britain has moved forward with the creation of the Division of Sport and Exercise Psychology (DSEP) within the British Psychological Society (BPS). As discussed by Anderson and Lavallee (2005), the DSEP is faced with a number of challenges regarding the training and registration of practitioners. Anderson and Lavallee provided details about the training and registration procedures operating in Australia and America by interviewing, via email, the presidents of the Australian Psychological Society's (APS) College of Sport Psychologists (Professor Peter Terry), and the American Psychological Association's (APA) Division 47 Exercise and Sport Psychology (Professor Judy Van Raalte). Anderson and Lavallee also discussed a number of issues arising from the interviews as they relate to Britain. In this article we present our reflections on Anderson and Lavallee's work. We hope that these reflections add to Anderson and Lavallee's article and contribute to the discussions that will take place as the DSEP progresses. We have structured our comments around the three subheadings Anderson and Lavallee used in their commentary.

Postgraduate training

Anderson and Lavallee (2005) suggested one challenge facing the DSEP is determining the curriculum content of specialist masters courses in sport and exercise psychology. Professor Terry's comment that Australian sport psychologists are psychologists first, and specialists second, resonated with us and we believe that this philosophy should inform course curriculum. One possible advantage of the Australian system is that students develop general psychology skills that help them gain employment in areas other than sport and exercise. In addition to sport and exercise psychology, students also study topics such as counselling, ethics, and psychological assessment. In Australia, there are limited opportunities for students to obtain full-time employment in sport and exercise psychology related careers, and although the situation is changing, we think a similar state of affairs exists in Britain. Students training in sport and exercise psychology might benefit from being able to register as chartered psychologists at the completion of their training, even if they chose not to use the chartered sport and exercise psychologist title (the DSEP is currently striving to obtain the specialist title; see www.bps.org.uk/spex/join).

In both Australia and Britain, much sport and exercise psychology education occurs in human movement departments. Students in Australian human movement departments who develop interests in sport and exercise psychology are unable to enter postgraduate APS accredited courses unless they have completed four years of undergraduate general psychology study. Some talented students might be discouraged from pursuing careers in sport and exercise psychology because they need additional qualifications to allow them entry onto APS accredited postgraduate courses. It is conceivable that a similar situation will develop in Britain. There are solutions such as postgraduate conversion courses and the Graduate Basis for Registration (GBR) examination (see www.bps.

org.uk/careers/accredited-courses). Each solution, however, requires students to invest additional time and money, and they might have to complete a lengthy education for entry into a profession that has limited job opportunities. As an additional issue, if students want to gain a BPS accredited MSc that will contribute towards chartered status, then they need to have their GBR at the outset. If they don't have GBR then they can still complete the degree but it will not contribute towards registration. It seems inequitable to us that students who have completed the same course are treated differently. Possible solutions to these issues might include (a) restricting entrance onto BPS accredited MSc courses to students with their GBR, (b) allowing undergraduate students on sport science degrees opportunities to complete joint honours degree in sport science and psychology, and (c) including the GBR as part of an extended MSc. Also, advertising the requirements for chartered psychologist status may help some students to plan their studies earlier.

Continuing Professional Development

Anderson and Lavallee did not consider supervision under their *Continued Professional Development* heading, but did discuss the topic under the heading *Practical Experience and Supervision*. We suggest that supervision should be part of a continuing professional development scheme. Often continued professional development consists of workshops and courses. Counsellors and therapists of various persuasions, however, have indicated that supervision was more helpful to their career development than taking workshops and courses (Orlinsky *et al.*, 2001). Anderson and Lavallee mentioned some issues that have to be addressed, such as payment and supervisor training, and considerable thought will help identify ways to resolve these matters. Potentially, the benefits of continued supervision make attempts to resolve issues worth pursuing. For example, the use of group and collegial supervision might help keep costs to a minimum.

Practical experience and supervision

In general, supervision in sport and exercise psychology is an area that deserves more attention from researchers and practitioners (Andersen, 2004). Although, for example, supervised work experience might be considered a central component of training, the quality as well as quantity of supervision warrants consideration. For example, specifying a minimum number of hours may not guarantee that optimal supervision takes place (see Tod, Marchant & Andersen, 2004). Barney, Andersen and Riggs (1996) proposed a model of supervisor training in sport and exercise psychology that might help inform debate within the British sport and exercise psychology community. The model focused on advanced students supervising beginning students, while receiving peer supervision from classmates and meta-supervision from professional elders.

Anderson and Lavallee raised the issue of allowing students to gain supervised practical experience from outside sport. Providing opportunities for students to work in settings other than sport and exercise may help them develop competencies that assist them in obtaining employment after graduation. A broad interpretation of sport and exercise may allow students to complete placements in a variety of contexts, including medical and rehabilitation settings.

Anderson and Lavallee provided a valuable contribution to the literature on sport and exercise psychology training and registration in Britain. There is much to be learned from examining the ways that other organisations have dealt with training and registration. In addition to the APS and APA, examining the ways training and registration have been approached by other organisations may prove beneficial. It might be worth examining the Association for the Advancement of Applied Sport Psychology's (AAASP) certified consultant scheme (see www.aaasponline.org/cc). For example, reviewing AAASP's grandparenting procedures for individuals who achieved their doctoral degrees prior to 1992 might help the

DSEP decide how individuals who have not completed BPS accredited courses could be treated. Training and registration are central to ensuring the quality of future practitioners, and gaining a broad understanding of how various organisations have approached the topics can help inform discussions within the DSEP.

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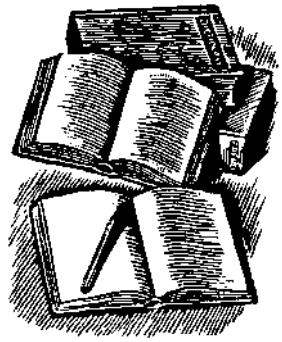

Book Review

Sport Psychology: Theory, Applications & Issues (2nd Edition)

T. Morris & J. Summers (Eds.),
John Wiley & Sons,
Milton, Queensland, 2004
ISBN: 0-470-80008-9

Reviewed by Caroline Douglas

In the preface of the second edition of *Sport Psychology: Theory, Applications and Issues*, Morris and Summers state that in this second edition they seek to reflect the increasingly global nature of sport and exercise psychology research that has occurred in the ten years since the first edition. This represents a clear departure from the original text, which sought to both establish the Australasian perspective and also serve the educational demands of this domain (Morris & Summers, 1995, pp. xxiii). The editors have attacked their new remit by way of much overhaul of content. Through an introduction of more international academics and practitioners they have largely achieved their ambitious goal. The international flavour prevails throughout the text, keenly fashioned by the use a huge variety of examples from elite world sport. Whilst the book still retains a core Australian viewpoint, considerable attention is given to the global development of professional sport psychology bodies in the introductory chapter, through a continent-by-continent examination that extends beyond the usual suspects. This reflection of worldwide developments in practice and training protocols is additionally supported, and also neatly rounded-up, with the inclusion of a new chapter by Andersen on the evolution of training and supervision. Addressing the models of certification used in North America, the UK and Australia, it includes an investigation of supervisory practices and issues that will be of particular relevance to the target audience of trainees seeking future training and professional development opportunities.

The text remains divided into three sections, although the titles have changed slightly: Part 1, 'Theory and Research'; Part 2, 'Applications in Sport Psychology'; and Part 3, 'Current Issues'. A review of the first edition by Hale (1997) critiqued the absence of applied hot topics, such as burnout and eating disorders in a comprehensive text. This has not been remedied in the second edition, but given the considerable revamp of subject matter the editors have chosen to address the rationales for the continued absence of such areas and the preferential inclusion of other topics. Validation for dropping chapters such as gender issues, qualitative research and attribution theory is also provided. Despite some wholesale changes the text retains the practical future directions, conclusions and summary sections to complete each chapter. This is now supplemented with a selection of review questions and shaded pages to indicate this closing segment. The look of the whole textbook is enhanced through a more considerable use of highlighted headings, key pages and diagrams.

Part 1, on theoretical and research issues, includes eight chapters. However substantial content changes have been made which enables a systematic and fluid progression across the research areas as the well chosen

chapters in this section gel together well. In Chapter 1, Aidman and Scofield bring new reflections and approaches to Morris's original chapter on traditional approaches of assessment by drawing upon themes of athletic identity and self-concept to offer wider considerations in an area hindered by issues of measurement. Chapter 2 is a new topic addition by Terry on mood and emotion, which efficiently assesses current models in the literature and greatly supports reader accessibility by presenting relevant empirical findings alongside theory. In chapter 3, the scope within the area of anxiety is given full recognition. Hale (1997) criticised the first edition suggesting the topic would be more appropriately addressed if the consideration of applied interventions for anxiety was carried in another part of the text. The editors appear to have tidied up this area which literally sprawled across four chapters over two parts of the book, by dividing the matter into two succinct and fittingly located chapters, one theory based and the other applied. As such, Marchant and Morris present a full review of key developments in sport anxiety research including reversal theory and an examination of the antecedents of choking. This chapter is notable for a particularly international selection of real world examples and discussion, which ably sets the scene for consideration of applied perspectives in a chapter in the subsequent part of the book. In Chapter 4, Moran and Summers thoroughly cover the three key theoretical perspectives in a well-organised chapter that also examines the dimensions of attention. Previously manifesting as a single chapter on individual and social motivation, Chapters 5 and 6 (on intrinsic and extrinsic motivation by Frederick-Recascino and Morris and achievement goal theory by Chi, respectively) share the motivational load in a development that better acknowledges the diversity of theory in this area and permits more thorough examination of these facets. This potentially allows readers to more accurately target particulars fields.

In this second edition, prior chapters on attribution theory and social facilitation have been removed. Additionally, Morris's original chapter on self-efficacy is now consumed within Chapter 7, which focuses on Self-confidence and is authored by Morris and Koehn. An excellent reflection on the dual concepts of state self-confidence and sport confidence alongside self-efficacy is coupled with a critique of currently utilised inventories in this chapter. However, it is somewhat let-down by a future directions section that fails to present any firm potential developments in a relatively under researched area of sport psychology. Closing with Chapter 8, Hodge presents current perspectives in team dynamics in a comprehensive review coloured with solid up-to-date practical examples, it is especially accessible. As a whole, the revised Part 1 feels far more substantial and it is undoubtedly more functional as the parts of its sum appear to be pulling their individual weight.

In an especially damning part of his review Hale (1997) concluded that part 2 of the original text did not succeed as an updated analysis due to lack of research grounding and how-to intervention explanations and cited several chapters as 'weak'. Whilst no chapters in the section have been replaced as such, renowned contributors have again been sought to provide fresh approaches to current key issues. This is apparent in the new Chapter 10 on Goal Setting, now contributed by Weinberg. Not only is content overhauled, but also the way the information is structured, or proffered, for use. This chapter in the original edition largely consisted of on a brief goal setting cookbook. In this second edition, Weinberg provides a very accessible review of the industry vs. sport and exercise setting research debate. Additionally, the weaker links in the chain of the goal setting process are identified through examination of recent research into elite athletes and coaches attitudes to and usage of goal setting. This serves to put forward a far more rounded presentation of an area frequently sought-out

by students, practitioners and interested professionals alike.

Two original chapters on stress management and ways of coping have been merged into a chapter on anxiety and coping written by Smith and Smoll. Covering the applied aspect of anxiety management formerly in part 1, this provides a robust and detailed examination of intervention models and some good pointers for interested readers in the future directions section. In a new chapter, Henschen and Newton contribute on building confidence in sport with a thorough chapter that supports the research presented in chapter 7. The imagery chapter by Perry and Morris successfully rejuvenates a solid and extremely practical chapter. However, the 'current' research presented is dated in comparison to literature employed in the rest of the text. The chapter would benefit from the introduction of some more recent applied models, such as PETTLEP (Holmes & Collins, 2001) to add more theoretical support to the vast information supplied regarding putting together an imagery programme.

Chapter 14 remains unchanged with contribution provided by Bond and Sargent. Hale (1997) was extremely disparaging of this chapter previously stating that it was "over-accepting in its support of the TAIS". Analysis of Nideffer's model of attention still makes up at least one-third of the chapter content. However, better empirical support is now provided for the many suggested concentration skills. Additionally, reviews of areas such as neuro-linguistic programming and the use of meditation techniques in combination with a more balanced smattering of real world examples both complement and enhance this chapter. Jackson and Wrigley supply a new chapter on optimal experiences in sport examined from the perspective of flow. Written and structured in a fresh and enthusiastic manner, this exhaustive look at the area provides an excellent and current overview.

In Part 3 a notable inclusion reflecting developments in the field is a contribution by Boutcher on psychophysiology, which provides a bracing look across the background and research developments over the last ten years. Sadly, it tenders little in the way of future research directions for interested students. Indeed, this is a general theme throughout the text, with the future research directions sections often quite light and failing to deliver concrete direction. The editors do suggest that "to many of our readers, these sections should be of great interest, yet we must expect that today's students will be the sport and exercise psychologists who develop the field in the future" (pp. 15). However, the book does suffer in comparison to the comprehensive future development sections provided in other recent texts such as Horn (2002) and Moran (2004). While the closing chapter by Morris, entitled Sport and exercise psychology: Into the future, addresses this area in a more general manner, it may be that the editors' aim of presenting developments through a "snapshot" of "current status of theory" (pp. 13) is more about laying foundations for potential development.

Overall, this text represents a substantial body of up-to-date research and applied techniques from respected sport and exercise psychologists, which is strengthened by a forward thinking approach. The addition of the new contributors makes for sharper analysis and organisation, and steadies the ship somewhat. With a crisper approach this edition also surpasses the standards set by the previous edition through updated literature interwoven with practical examples that 'colour-in' the theory and meet the needs and interests of the target undergraduate reader. As such, this makes for an extremely thorough textbook, outstanding in both breadth and global perspective. On a downbeat note, despite the large headings and coloured sections, presentation of material is sometimes structured in such a format that it can be difficult to find key themes within the content. The reader is invited on a research journey to find their

answers, but this can be more of a hindrance than a help overall; whilst this text is more up-to-date and comprehensive than its rivals it still somehow lacks a certain manoeuvrability.

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Skill acquisition in sport: Research, theory and practice.

Williams, A.M., & Hodges, N. (Eds.). London: Routledge, (2004).
ISBN: 0-415-270758

Reviewed by Ian Renshaw

In the preface of *Skill Acquisition in Sport: Research, Theory and Practice* the Editors point out that despite the importance of skilled behaviour to all aspects of human life, it is an area that is under-researched. Traditionally, in many higher education institutions, skill acquisition is an area covered (if at all) within the sport and exercise psychology curriculum. As such, limited time is often allocated to this significant area. Additionally, it is often taught by sport psychologists who have limited interest or in-depth understanding of the sub-discipline. The effect of this is that research in skill acquisition may not be encouraged, as sport psychology lecturers may guide students to research within the lecturers that are currently more popular, particularly with those interested in working with athletes in an applied setting. This has a knock-on effect in that minimal research is being disseminated to practitioners, resulting in practice structures and coaching processes that are more often than not based on historical accounts of coaching and the adoption of the 'recipes' of famous, successful coaches. Williams and Hodges highlight that one of the aims of this book is to try and counter-balance the lack of research in skill acquisition by providing a comprehensive review of contemporary empirical findings in practice and instruction in the acquisition of sports skills. The authors highlight that their target audience is mainly academics, research students and high level practitioners within the motor behaviour field. The targeting of practitioners maybe somewhat ambitious and in my opinion the potential of this book to change coaching practice should be considered as part of a more long-term project, via the creation of more skill acquisition research which is then disseminated to coaches at all levels of performance.

The strength of a book of this type is determined by the quality of the contributing authors. Williams and Hodges should therefore be highly commended for their ability to persuade many of the top research groups around the world to contribute to this venture. An immediate example of the quality of the contributing authors can be seen in the first scene setting chapter written by Jeff Summers. Given the reduced attention to general theories of psychology within sport science type degree courses, this chapter is ideal as it provides the potential researcher with an excellent overview of the roots of modern day skill acquisition research. Summers provides a fascinating timeline of motor behaviour research, showing how it initially emerged as a sub-branch of experimental psychology and that

research topics were (and are) influenced by the emergence of new theoretical approaches within general psychology, as well as the importing of ideas from areas such as engineering and computer science. The section concludes with a review of 'where to from here'. A further strength of this chapter is that the author provides an overview of both North American and European research, something that is often missing in many texts in the area.

The book is then split into sections that are for the most part based on the three main theoretical frameworks that underpin the majority of contemporary motor behaviour research. As such, section one is based on research undertaken largely from the information processing approach, section two on research from the expertise approach and section three on research from the ecological psychology and dynamical systems approaches.

Section one contains chapters on contextual interference, visual feedback, one-trial motor learning, individual differences, decision training, augmented feedback, instructions and demonstrations, observational learning, and implicit learning. Although the chapters in this section are largely information processing based, it should be pointed out that a number of authors provide both cognitive and ecological psychology explanations of their specialist area. This is good news for the potential researcher who is provided with a broader understanding of the topic and is able to make a more informed choice as to which theoretical approach to base his work upon.

Section two has five chapters; deliberate practice, a life-span model of the acquisition and retention of expert perceptual-motor skill acquisition, psycho-physiological and related indices of attention, the role of memory and attention in the development from novice to expert and a final chapter that considers the implications of the research findings on perceptual and cognitive expertise on skill acquisition and performance enhancement.

The third and final section is based on the ecological and dynamical systems approaches and begins with a chapter that provides an explanation of how coordination evolves when considered from a dynamical systems viewpoint. This is followed by further chapters that examine perceptual learning and degrees of freedom, and how muscular skeletal constraints impact on skill acquisition. In the book's final chapter, a summary is provided on the constraint-led perspective to explain skill learning. This latter chapter might be of particular interest given the claim by Summers that the constraints-led perspective is "the most influential framework for examining skill acquisition from an ecological perspective" (p.17).

Each chapter follows a similar format, with a comprehensive review of current research and theory in their area of interest, being followed by a summary of potential avenues for future work, and in most cases, implications for instruction and practice. Overall, there are many very good chapters, almost all of which would be essential reading for the potential researcher. The outstanding chapters are characterised by worthwhile conclusions that would lead to fruitful challenges for interested parties.

In summary, I support the editors' view that Skill Acquisition in Sport: Research, Theory and Practice will be of interest to those involved in motor behaviour work in the sport and movement sciences, as well as physical therapy, ergonomics and human factors'. As well as potential researchers of motor behaviour, I would also suggest that the book would be an invaluable resource for academics required to teach this area. Ultimately, for those interested in skill acquisition this is a great book to dip into regardless of paradigm or specialism.

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Conference Report

The British Psychological Society Quinquennial Conference, Manchester, March 30 – April 2, 2005

Paul Russell

THE BRITISH Psychological Society hosted its Quinquennial Conference during the Easter period at the University of Manchester. Over 20 subsystems were represented, resulting in one of the largest ever psychology events in the United Kingdom. Overall, there were 15 streams of symposia, free communications, posters, workshops and a large exhibition area. A pre-conference workshop hosted by the Division of Sport and Exercise Psychology (DSEP) entitled, 'Experiences from the Athens Olympics' looked an exciting and positive way to start the conference. The workshop, organised by Dr. Ailsa Anderson and Sarah Cecil, drew on the reflections of four sport psychologists who provided support to the Great Britain Olympic and Paralympic teams during the summer 2004 event. The workshop was well-attended, with approximately forty delegates enjoying a thoroughly stimulating and thought-provoking day. It was also good to see that the workshop delegates were drawn from a range of both academic and applied backgrounds; this was reflected in the range of insightful questions that the audience asked of the presenters throughout.

Although each presenter attended the Olympic/Paralympic Games, this is where a large degree of similarity ended. Their perspectives and individual thoughts about the wide diversity of experiences they reported highlighted how unique this environment is. The first presenter, Professor Ian Maynard, reflected on his experiences in providing psychological support to the Royal Yachting Association. The presentation revealed the extensive psychological and organisational preparation that is required pre-travelling to allow the athletes the best opportunity to achieve. Professor Maynard emphasised the importance of simulation training and preparing the athletes for the unique atmosphere of the 'Big Show'. The presentation also showed how the use of video footage can be effective in getting key messages across to athletes. Short clips from *Star Wars* and *Any Given Sunday* certainly conveyed powerful messages for the athletes.

The second presenter, Dr Jonathan Katz, was the Headquarters Psychologist at the Paralympic Games for Team GB. His insightful account outlined the unique demands placed on these athletes in this environment, and how specific considerations have to be made to issues like travelling and accommodation. Dr Katz's evaluation of his experiences also revealed the inherent problems that surround accreditation and security at major multi-sport competitions. This was echoed in the third presentation by Dr Jonathan Males, who was the British Headquarters Psychologist at the Athens Olympic Games. Dr Males was not attached to a particular sport in this role, and he revealed how he was able to effectively deliver psychological support to athletes who he had previously not worked with.

The final presenter, Dr Sheelagh Rodgers, provided a clinical perspective of her role at the Olympics. The presentation

highlighted the wide range of clinical issues she was confronted with including self-harm, depression and eating disorders, and how she was able to help athletes cope with these effectively. I think it is always pertinent to be reminded that athletes, just because of what they do, are not immune to these issues.

The workshop was rounded off with a plenary session where the presenters were able to answer specific points of interest from the audience. Overall, I think that the reflections of practitioners always provides a useful insight into the unique demands of consultancy work, especially in an environment like the Olympics which must surely be one of the most demanding and surreal places to work. The workshop gave a real insight, especially for those practitioners who have not attended a major multi-nations event, into the unique and 'pressure-cooker' environment at an Olympic Games.

The first day of the full conference for the DSEP had a focus on interpersonal relationship. In an invited keynote address, Professor Maureen Weiss from the University of Virginia examined the role of peer networks and relationships in athletes and the impact that this has on fostering positive development in young participants. Dr Sophia Jowett also convened a symposium on 'Interpersonal Relationships in Sport and Exercise Settings' on behalf of the DSEP. The five individual presentations in the symposium were highly thought-provoking and produced an insight into the importance and impact that interpersonal relationships have on individuals, especially young participants. Whilst a lack of space does not permit a review of all the individual contributors I will mention one which I found particularly interesting. Melina Timson-Katchis from Loughborough University revealed the complex relationship that children can have with their parents who are also their coaches. Using a narrative approach the research highlighted that the interpersonal closeness of the athletic relationship was determined by the closeness of the familial relationship, and the importance of separating the familial and athletic relationships was pertinent to a positive experience. The research answered many questions related to this issue, but is surely an important area that deserves to be given greater scrutiny in the future.

Dr Mark Beauchamp convened a symposium on the second day of the conference entitled, 'Group Dynamics in Sport and Exercise'. Dr Beauchamp and colleagues reported in the symposium their research into the construct of collective clarity within interdependent teams. While role clarity is a well-researched area, collective clarity (the degree to which a group is clear about its conjoint responsibilities) has received little consideration. Through qualitative enquiries, these researchers have developed a conceptual model of collective clarity (goals/objectives, strategy, leadership, consequences, and evaluation) along with the *Collective Clarity Questionnaire*. The future research opportunities in this new area seem very exciting and I look forward to following the developments with interest.

The final DSEP session of the conference was a very enjoyable keynote address by Professor Albert Carron from the University of Western Ontario. His presentation examined the role of social context in physical activity, which is very topical issue with recent government concerns surrounding obesity and physical activity levels. In the research reported, Professor Carron specifically considered what the optimal context for sustained physical activity is – and proposed that group-based physical activity seemed to promote increased sustainability in physical activity. Further evidence supported the idea that by promoting a 'sense of belonging' in a physical activity context could facilitate a greater probability of behavioural change. These findings could certainly be useful areas for physical activity providers in Great Britain to investigate and incorporate into their practices.

Overall, I think this BPS conference was the best yet for sport and exercise psychology. The oral presentations (on coping with

fear of failure, body dissatisfaction and physical activity, and antecedents of approach and avoidance achievement goals) were interesting and informative, as were the posters sessions (which covered a diverse range of topics including visual search strategies in football referees, anxiety in archers, and exercise and risk making decisions). The conference also provided excellent continuing professional development opportunities for all members. I think that this bodes well for the future of the DSEP within the BPS. For the start of any new Division there are challenges and exciting times ahead, and I believe that the strength of the DSEP is reflected in its contribution to the 2005 BPS Conference. It might now be the time to consider organising an inaugural DSEP Conference.

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Football Association Diploma in Psychology

THE FOOTBALL Association has been proactive in integrating psychology into its education programme by appointing a Working Party and Advisory Panel, developing five levels of Psychology Certificate courses, and holding annual conferences. Of particular interest to experienced sport and exercise psychologists is the FA Diploma in Psychology, which takes place over a minimum of one year and includes attendance at three, 3-day residential blocks, normally held in May and October each year. Candidates for the Diploma must be chartered by the BPS or have BASES accreditation, though people working toward these may be accepted to attend but cannot receive the Diploma until after attaining the appropriate status.

Aside from attendance, requirements include tasks between blocks, the submission of a reflective logbook, and a 90-minute individual presentation (which must contain an interactive element) on any aspect of football and psychology. A dedicated FA website includes details of all the presentations and tasks and allows for intergroup communication between the sessions.

One extremely attractive aspect of the Diploma is that a wide range of experienced football personnel such as players, coaches and managers are also enrolled. These candidates receive a Level 5 certificate rather than the Diploma. The interactions within the group allow for a valuable exchange of perspectives and an ideal opportunity for networking.

The first cohort recently completed three blocks and were treated to a number of guest speakers including Howard Wilkinson, Graham Taylor, Peter Reid and Bryan Flynn, plus international sport psychologists such as Dan Gould and Paul Wylleman. Televised and live football matches were observed to support the tasks and presentations.

Sport psychologists, particularly football enthusiasts, will find the Diploma rewarding on many levels. Indeed, the participants' evaluations of the programme revealed unanimously positive overall feedback. Football clubs will be made aware of successful candidates through the FA Psychologists Directory.

For information about enrolling, contact Dr. Andy Cale at the Football Association: Andy.Cale@TheFA.com

Professor Precilla Choi

It is with deep sadness and regret that we inform members of the death of Precilla Choi, a long standing and active member of the Sport and Exercise Psychology Section, as well as a full member of the Division of Health Psychology. She took up an appointment in Australia at Victoria University in Melbourne, where she was an Associate Professor in the School of Human Movement, Recreation and Performance. The funeral was held in Australia on 18 May 2005.

Statutory Regulation

On 9 June 2005, the BPS rejected the Department of Health's proposal that the Health Professions Council should take responsibility for the statutory regulation of psychologists. The Society's response, as well as other information, can be found at www.bps.org.uk/statreg.

Full membership of the DSEP

Full Membership of the DSEP confers eligibility for Registration as a Chartered Psychologist. You can apply both for Full Membership of the Division and Registration as a Chartered Psychologist using forms on the membership pages of the Society's website (www.bps.org.uk).

Specialist title

It is hoped that Full Members of the DSEP who have also been admitted to the Register of Chartered Psychologists will soon be able to use a specialist title. The proposed specialist title is 'Chartered Sport and Exercise Psychologist' but this is yet to be approved by the Society's membership. The Division is currently recruiting Chartered Psychologists to represent Sport and Exercise Psychology on many of the Society's Committees. Therefore, it would be beneficial if all Full members of the DSEP were also Registered as Chartered Psychologists so that they could be considered to represent the Division on one of the Society's Boards or Committees. If any member requires any further information please do not hesitate to contact Angie Cain (angcai@bps.org.uk).

Memorandum of collaboration with BASES

A memorandum of collaboration between the DSEP and British Association of Sport and Exercise Sciences (BASES) has been approved by the acting Chief Executive of the BPS. The Memorandum formally outlines an undertaking for the two societies to collaborate for the benefit of members and the sport and exercise community. This will be achieved through such activities as the pursuit of more generous funding for research, provision of opportunities for the excellence in teaching, and promotion of events designed to share best practice. Economies of scale will be pursued through joint insurance schemes and reduced conference rates, and cross-committee representation will be encouraged. A joint committee will be established to facilitate combined ventures.

New Committee members

Welcome to Iain Greenlees (University College Chichester) and Dave Shaw (University of Central Lancashire), who were co-opted onto the DSEP Committee earlier this year.

DSEP website

The DSEP website can be found at www.bps.org.uk/spex. The website includes information on: News; How to Join; Links of Interest; About Sport and Exercise Psychology; Committee; Publications; Events; Awards and Prizes; and About the Division. Many thanks to Marc Jones and Paul Russell for their efforts, as well as Hugh Richards for his work on the previous Section website.

The Psychologist

The Psychologist has a redesigned website (www.thepsychologist.org.uk), which includes a *Forum* section providing a discussion facility for three types of thread: discuss and debate (for anything prompted by something you have read in *The Psychologist*, or any other psychological issue); information (e.g. seeking information from the psychological community, work experience, participants for a study); and question time (for seeking serious or offbeat questions that can prompt evidence-based responses from a variety of psychologists).

Conference Diary

■ **Association for the Advancement of Applied Sport Psychology**

The 2005 AAASP Annual Conference will be held in Vancouver, BC from October 24–30, while the 2006 and 2007 conferences will be held in Miami, Florida and Louisville, Kentucky, respectively. See www.aaasponline.org for further details.

■ **American Alliance for Health, Physical Education, Recreation and Dance**

The 2006 AAHPERD Annual Convention will be held in Salt Lake City, Utah from April 25–29. See www.aahperd.org/calendar for further details.

■ **British Association of Sport and Exercise Sciences**

The 2006 BASES Annual Conference will be held at the University of Wolverhampton, and the 2007 Annual Conference will be held at the University of Bath. The 2006 BASES Student Conference will be held at Heriot-Watt University from March 30–31. See www.bases.org.uk for further details.

■ **British Psychological Society**

The 2006 BPS Annual Conference will be held in Cardiff from 30 March to 1 April. See www.bps.org.uk for further details.

■ **European Federation of Sport Psychology**

The next FEPSAC conference will be held in Halkidiki, Greece from 4–9 September, 2007. The conference theme is Sport and Exercise Psychology across the Life Span. See www.fepsac2007.gr for further details.

■ **European Congress of Sport Science**

The 11th ECSS Congress will take place in Lausanne, Switzerland (dates to be finalised). See www.ecss.de/html/Congresses/11Lausanne.htm for further details.

■ **North American Society for the Psychology of Sport and Physical Activity**

The NASPSPA 2006 conference will take place at Denver, Colorado on 1–3 June. See www.naspspa.org for further details.

■ **Edinburgh Lectures**

This one day conference of plenary state of the art lectures aims to provide high quality reviews for an audience of A-Level, Higher and Undergraduate students of psychology. Professor Dave Collins, Performance Director of UK Athletics, will present a lecture as part of this conference entitled, *Creating Champions: Psychology of Peak Performers*. The 2005 Edinburgh Lectures will be held on November 8 at The Assembly Rooms.

PhD Prize

The DSEP has established an annual prize to be awarded to the PhD student from a University in the United Kingdom whose thesis is regarded to be an exceptional, innovative contribution to knowledge in the field. Research on any aspect of sport and exercise psychology is eligible. Further details are on p. 4.

News of Members

Marc Jones presented the Walters Idris Jones Memorial Lecture recently at the University of Wales, Aberystwyth. The lecture, which was delivered through the medium of Welsh, was Emosiwn yn Chwaraeon (Emotions in Sport).

Notes for Contributors

Sport & Exercise Psychology Review is designed to provide a forum for the dissemination of information to the Division of Sport and Exercise Psychology membership and other interested parties. It contains articles, research notes, commentaries, student member items, book reviews and conference reports, and the Editorial Board would also like to encourage submissions for a Conference Diary, along with News of Members. Authors who are in doubt as to whether their work falls within the remit of *SEPR* are invited to send brief preliminary details to members of the Editorial Board for advice.

Articles: Individual articles are published on all aspects of sport and exercise psychology up to a maximum of 3,000 words in length. Articles may provide a broad overview of a particular area or issue, or add a critical commentary on recent articles in *SEPR*. Articles concerned with the training of sport and exercise psychologists and the application and practice of sport and exercise psychology are particularly welcome, as are articles focussing on teaching sport and exercise psychology. All articles will be subject to review.

Research Notes: Informative reviews (1,000 words maximum) of papers published in peer-reviewed journals that would be of interest to the *SEPR* readership are welcome. Please send a copy of the full paper to the Editor along with the Research Note.

Book Reviews: Books are generally reviewed by invitation only. However, persons interested in writing a book review should contact the Editor in the first instance.

Student Members: Items of particular relevance to student members of the Division of Sport and Exercise Psychology are included in this feature.

Conference Reports: Brief reports on conferences of interest to the Division of Sport and Exercise Psychology are welcome, but it is suggested to contact the Editor first. These should focus on what is new and of general interest, rather than include background information about conferences.

Submissions

All submissions should be made electronically, and sent as an attachment compatible with Microsoft Word (for PC) to the Editor. If it is impossible to submit material electronically, mail one original copy and a disk version in Microsoft Word (for PC) to the Editor at the address below. Contributors are requested to provide postal addresses, telephone numbers and, where possible, fax numbers and e-mail address. A submission to *SEPR* implies that it has not been published elsewhere, and that it is not under consideration for publication. Accepted articles may have to wait for subsequent issues for publication.

All submissions should be typewritten, double spaced, with 1in margins in 12 point Times New Roman font. Authors should follow the British Psychological Society Guidelines for the Use of Non-Sexist Language contained in the *Code of Conduct, Ethical Principles and Guidelines* (available from the Society or from www.bps.org.uk/documents/code.pdf). References should conform to the guidelines outlined in the Society's *Style Guide*, available at www.bps.org.uk/documents/styleguide.pdf, which is based on the *Publication Manual* (5th ed.) of the American Psychological Association.

Contributors are also asked to keep tables and figures to a minimum. All artwork should be sent in a high-resolution PDF, EPS or TIFF format. Written permission should be obtained by authors for the reproduction of any material from other sources. Submissions that do not conform to these requirements will be returned for correction, and thus be delayed in publication.

The Editorial Board reserves the right to edit all copy published, although all reasonable attempts will be made to contact authors with regard to changes. Proofs of articles will not normally be sent to authors, unless requested. All authors of accepted submissions will be required to assign copyright to the Society.

All submissions should be sent to: David Lavallee, Editor, *Sport & Exercise Psychology Review*,
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