1   **A Penny for your Thoughts: Athletes' and Trainee Sport Psychologists' Internal Dialogue**

2   **during Consultations**

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Abstract

The purpose of this study was to explore the internal dialogue of trainee sport psychologists (TSPs) and athletes immediately following athlete-practitioner consultations. TSPs (4 males and 3 females, aged 22-32 years) and athletes (4 males, 3 females, aged 19-29 years) completed a thought-listing procedure twice, while watching video recordings of their previous consultations. The thought-listing procedure involved participants pausing the video to record the in-session internal dialogue they had experienced during the consultation. Participant's responses were categorised into six dimensions: time, place, focus, locus, orientation, and mode. TSPs' and athletes' retrospective accounts provided evidence that their in-session internal dialogue was (a) present focused, (b) about in-session material, (c) about the athletes or themselves, (d) about internal and external events, (e) professional (i.e., related to the session), and (f) neutral. Findings provide trainees and inexperienced practitioners with insights into the thought content of TSPs and athletes to guide their own athlete-interactions.

Keywords: Internal Dialogue; Thought-Listing; Applied Sport Psychology; Cognition

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3   The person of the practitioner is recognised as a critical tool in the provision of effective

4   sport psychology service-delivery (Poczwardowski, 2017). As the instrument of service delivery, it

5   is difficult to separate the person of the practitioner from the process of effective applied sport and

6   exercise psychology (Tod et al., 2017). As such, the practitioner's use of self is based on the need

7   for them to understand their own cognitive activity. Cognitions that potentially contribute to

8   service-delivery are beliefs, expectations, emotions, and perceptions. This cognitive activity has the

9   potential to be "a positive form of self-consciousness" (Egan & Reese, 2021, pp. p. 88-89). Basch

10   (1980) discusses how practitioners continuously form impressions of the client by becoming aware

11   of their own internal reflections based on the feelings, thoughts, and memories that are stimulated.

12   In turn, these internal reflections may lead to perspectives on the client, what they want from the

13   practitioner and in determining how to best communicate with them. According to Basch (1980)

14   practitioners move between listening to the client's manifest content (spoken) and latent content

15   (unspoken) and their own manifest and latent content. Consequently, individuals are managing four

16   channels of information simultaneously. Managing the flow of information from each channel

17   allows practitioners to listen to the client and to hear their own thought processes (Egan & Reese,

18   2021). For example, practitioners might reflect on how they react emotionally to clients and use this

19   to inform ~~to guide~~ future interactions (Yalom, 1989). This type of internal and in-the-moment

20   reflection has previously been referred to as reflection-in-action (Schon, 1983; Cropley et al., 2023).

21   Helping professions such as such as nursing (Banning, 2008), and physiotherapy (Atkinson &

22   Nixon-Cave, 2011) have explored how practitioners attend to their own thought processes as they

23   occur to promote reflection-in-action. More specifically promoting the verbalisation of thought

24   processes during a clinical encounter has been found to promote meta-cognitive processes

25   (reflection-in-action) in nursing students (Banning, 2008).

26   Within sport and exercise psychology, researchers have focussed almost exclusively on

27   athletes' internal dialogue when participating in sport and exercise (e.g., Van Raalte & Vincent,

1   2017). When researchers have examined internal dialogue, it has most commonly been under the

2   guise of the term self-talk. There is overlap between the terms internal dialogue and self-talk and to

3   orientate the reader, we consider both as statements, phrases, or cue words that: are addressed to the

4   self, might be said automatically or strategically, can be aloud or silent, can have an element of

5   interpretation, and include similar grammar to ordinary speech (Latinjak, 2019).

6   To date, researchers have built an understanding of athletes' internal dialogue related to

7   performance (see for example, Aitchison et al., 2013; Whitehead et al., 2018). From an athlete

8   performance perspective, researchers have identified how internal dialogue can be influenced by the

9   intensity of the activity (Aitchison et al., 2013), and how athletes' internal dialogue changes over

10 the duration of an activity (Whitehead et al., 2018). Collectively, from a cognitive-behavioural

11 perspective, the research demonstrates that internal dialogue is a key influence on feelings and

12 behaviours (Eubank et al., 2020). However, within a consulting context, we may also consider that

13 in-session internal dialogue (just as between-session reflection) influences practitioners' emotions,

14 decisions, behaviours, and indirectly, service-delivery outcomes. Findings on athlete internal

15 dialogue or self-talk provide a basis for further study, particularly as applied to practitioner

16 development. Understanding athlete and practitioner internal thought processes may contribute to

17 knowledge on how applied sport psychology is experienced. Counselling researchers have found

18 that retrospective accounts of therapist self-talk and internal dialogue are related to other aspects of

19 therapy, such as perceived helpfulness (Nutt Williams, 2008). For example, client focused internal

20 dialogue is associated with clients' perceptions of therapist helpfulness. Potentially, the findings

21 from psychotherapy have parallels in sport and exercise psychology but require context-specific

22 investigation. Within the professional development literature in sport and exercise psychology,

23 trainee's internal dialogue can function as a distractor to being cognitively and emotionally present

24 with clients (McEwan & Tod, 2023). While it is insightful to know that trainee psychologists

25 struggle to manage being present during service-delivery, this information was captured using

26 retrospective semi-structured interviews and did not seek to gain direct understanding of the

27 concurrent thought processes of participants (i.e., reflection-in-action).

1   A useful starting point could be to ask athletes and practitioners to engage in an established

2   thought-listing exercise to record internal dialogue as close to the service-delivery consultation as

3   possible. Dole et al., (1981) provide a framework for counsellors and therapists to thought-list

4   (please see method section for a description). This framework has potential for transfer to other

5   helping professions (e.g., sport and exercise psychologists). Retrospectively requesting participants

6   to share their internal dialogue is most appropriate for sport and exercise psychology consultations,

7   as this method does not interfere with participants' thought processes during consultations. The aim

8   of this study was to describe trainee sport and exercise psychologists' (TSPs') and athletes' in-

9   session internal dialogue.

10   Several benefits might accrue from examining in-session internal dialogue. Understanding

11   athletes' in-session internal dialogue, and how they perceive practitioners' actions, might equip

12   practitioners better to empathise with clients and form strong working alliances. In addition,

13   knowledge about practitioner in-session internal dialogue could potentially assist sport and exercise

14   psychologists in reflecting on how they think during athlete collaborations. Such self-reflection may

15   lead to changes in how practitioners undertake service-delivery. Educators and supervisors could

16   use knowledge derived from in-session internal dialogue to inform trainees about the types of

17   thoughts they and their athletes may experience. Beginning practitioners may feel better prepared

18   knowing the internal dialogue that typically occurs and find comfort in comparing their own

19   internal dialogues with those of other neophyte practitioners. The findings from this study might

20   also provide direction for researchers wishing to measure relationships between internal dialogue

21   and other variables, such as athlete satisfaction or working alliances.

22   **Method**

23   **Philosophical stance**

24   We base the current paper on a realist ontology and constructionist epistemology (Elder-

25   Vass, 2012). Regarding our realist ontology, we consider that there exists a reality independent of

26   ourselves as researchers (Ronkainen & Wiltshire, 2021). In this reality the consultations between

27   the trainees and athletes occurred, and during those sessions both individuals experienced internal

1   dialogue that we have attempted to examine. For the purposes of this study, we focus on what

2   Basch (1980) terms manifest content (the spoken rather than the unspoken content). Although a

3   reality exists, however, we realise that our knowledge of it is constructed and theory-laden,

4   reflecting our constructionist epistemology (Ronkainen & Wiltshire, 2021). Our knowledge is

5   fallible because we, as researchers, and our methods are imperfect and influenced by the context

6   and our own biases. For example, in constructing our study we needed to make choices about the

7   most feasible methods, not the perfect methods (which do not exist). This choice involved

8   balancing the advantages and disadvantages of competing methods. Although, for example, in the

9   retrospective recall method we used there is delay between the trainee-athlete sessions and data

10   collection, the advantage is that the consultations were uninterrupted by our attempts to collect data

11   and occurred as naturally as possible. The competing method of collecting real-time data would

12   have disrupted the trainee-athlete sessions to the point of being meaningless. In employing the

13   retrospect recall method, we have followed the guidelines underpinning its use and have explained

14   these below. As a second example, two individuals analysed the data independently from which we

15   calculated inter-rater reliability to help ensure that data analysis was not subject to the biases of one

16   individual.

17   **Participants**

18   The Australian TSPs (4 females, 3 males, ranging in ages from 22 to 32 years) were enrolled

19   in either a Master of Applied Psychology or Professional Doctorate degree specialising in sport and

20   exercise psychology. The TSPs had completed the first four years of psychology training prescribed

21   by the Australian Psychological Society (a three-year undergraduate degree followed by a 4th year

22   labelled as either an honours or postgraduate diploma). Two individuals had previous counselling

23   experience prior to their enrolment on their sport psychology degree. The remaining individuals had

24   started counselling clients the same year that we collected data for the current study. Although

25   trainees were enrolled in either a Masters or Professional Doctorate, they were all in the first year of

26   their postgraduate education and were enrolled in the same modules, focused on research methods,

27   sport and exercise psychology, and psychological practice. Full details of the requirements of their

studies can be found on the Australian Psychological Society (2022) study pathways website. The

trainees followed a counselling framework based on Egan and Reese's (2021) process. The

trainees' practice philosophy was influenced by the cognitive-behavioural, psychodynamic, and

humanistic approaches as they understood them from their lecturers and supervisors.

The Australian athletes (4 males, 3 females, ranging in ages from 19 to 29 years) were

students enrolled in undergraduate degrees, majoring in either human movement or psychology.

The primary sports athletes played included basketball, cricket, netball, tennis, track and field, and

wakeboarding, and their participation ranged from club to national level competitions. To be

eligible for inclusion, athletes had to be regularly participating in competitive sports, and have

personal or sporting concerns they wished to discuss with a sport psychologist. Having an issue

they wished to discuss helped ensure the consultancies were meaningful encounters.

Procedure

Recruitment. After the institution's human research ethics committee provided ethical

clearance, we contacted the TSPs on an individual basis, and explained the study's purpose, risks,

and safeguards before inviting them to participate both verbally and in written form. Prior to

participating in the study, individuals provided written informed consent. We focused on TSPs

because at the beginning of professional development trainees experience much conscious cognitive

activity when helping clients compared to seasoned practitioners (Skovholt & Ronnestad, 2012).

Having much conscious cognitive activity may have helped these individuals recall their cognitions

during the thought-listing exercise. To identify potential athletes, we explained the study's purpose,

risks, and safeguards to students enrolled in undergraduate sport psychology classes and asked them

to indicate privately if they were interested in learning more about the study. Four athletes were

interested and available to meet with practitioners. The remaining student athletes learned about the

study via their informal social networks, and we invited them to participate after they expressed

interest in the study. The issues athletes wished to discuss with a practitioner included anxiety

management, returning to competition after injuries, concentration, motivation, and relationship

difficulties. All athletes provided written informed consent before participating in the study. We

1   acknowledge that we set-up the trainee-athlete sessions and they did not arise organically. The

2   screening process helped ensure the athletes had an issue they wished to explore with a practitioner,

3   and they were not participating to gain course credit. Previous research has shown the screening

4   process ensures that meaningful discussions occur between practitioners and clients (Williams &

5   Hill, 1996).

6   *The TSP-athlete consultations.* Each student athlete met with a TSP on three occasions, at

7   times and locations of mutual convenience. Participants chose to space the consultations at least

8   seven days apart, and the dyads took between three and six weeks to complete the planned sessions.

9   To aid data collection, we filmed the first and third consultations. After starting the video camera,

10   we left the interview room before the consultations started. Participants stopped the video camera

11   after they had finished. The recorded consultations lasted 25 to 90 minutes. Times and locations for

12   further athlete-practitioner consultations were then arranged.

13   **Thought-Listing Exercise**

14   After the first and third consultations, the TSPs and the athletes completed the thought-

15   listing procedures while watching a video recording of the previous athlete-practitioner

16   consultation. We selected the thought-listing exercise used because previous research has shown

17   that it provides the best insight into counselling participants' in-session cognitions without

18   disrupting service-delivery as occurs with think aloud procedures (Borders et al., 1988; Cacioppo et

19   al., 1997; Dole et al., 1981). Thought-listing involved the recording being paused after each

20   practitioner-athlete couplet, defined as a practitioner's statement followed by an athlete's response

21   (Dole et al., 1981). During the pause, participants recorded the in-session internal dialogue they had

22   experienced at that moment in the consultation. To familiarize participants after the first session, we

23   reminded them of the purpose of the study. Then we explained the thought-listing activity and for

24   the first minute of the video, we engaged in interactive training to help the participants become

25   comfortable with the task. Our instructions focused on asking participants to record whatever

26   internal dialogue they had had at that moment in the consultation. Participants were free to ask any

27   questions they wished. To help the participants feel comfortable with the exercise, we told them all

1   responses were acceptable, even if irrelevant to the consultation, and they could record "blank" if

2   unable to remember what they had been thinking. We did not share participants responses with

3   other people involved in the study (e.g., we did not share the athletes' responses with the TSPs).

4   TSPs may have benefitted from learning about the athletes' cognitions (see below in the

5   discussion), but we felt doing so would not mimic naturally occurring practitioner-client

6   interactions. The thought listing exercise occurred within 24 hours of the athlete-practitioner

7   session.

8   **Data Analysis and Reliability**

9   To start, we transcribed participants' responses verbatim and identified individual thought-

10   listing text units (Cacioppo et al., 1997). We categorised the text units according to Dole et al.'s

11   (1981) classification framework. Using Dole et al.'s (1981) system each text unit is assessed across

12   six independent dimensions: *time, place, focus, locus, orientation,* and *mode*. With the first

13   dimension, time, text units were assessed according to whether they related to *past* (e.g., "she went

14   to practice last night"), *present* (e.g., "this session is helping him"), or *future events* (e.g., "I hope

15   she tries this idea at training"). In the second dimension, place, text units were classified according

16   to whether they related to events occurring either *in-session* (e.g., "this topic is easy to think about")

17   or *out-of-session* (e.g., "my supervisor told me to be more direct"). In the third dimension, focus,

18   text units were classified according to whether they are about the *client* (e.g., "she is talking a lot

19   today"), *practitioner* (e.g., "I just made a great suggestion"), or *client/practitioner unit* (e.g., "we

20   are really in sync today"). With the fourth dimension, locus, text units were categorised as referring

21   to either *internal* states (e.g., "she is happy") or *external* events (e.g., "he is smiling"). In the fifth

22   dimension, orientation, text units were either *related* to therapy (and labelled professional; e.g., "I

23   need to focus on her story") or *unrelated* to therapy (and termed personal; e.g., "I forgot to pay the

24   telephone bill"). In the sixth dimension, mode, text units were classified as *neutral* (e.g., "I am

25   sitting down"), *positive* (e.g., "I am clever to offer that suggestion"), or *negative* (e.g., "how stupid

26   am I?"). Dole et al.'s (1981) procedures helped structure the data analysis, not data collection; that

27   is, we did not share the system with participants. Instead, we allowed participants to report their

1   cognitions freely.

2   In addition to the client, counsellor, and client/counsellor text unit in the focus dimension,

3   we included two more categories labelled *counsellors' supervisor* and *other* used by Borders and

4   colleagues (Borders, 1989; Borders et al., 1988). An example of a supervisor internal dialogue unit

5   is "I wonder what my supervisor would say?" The other category included internal dialogue that we

6   could not assign to other focus dimension categories. In the mode dimension, Borders and

7   colleagues also added a category labelled *planning* (e.g., "I need to ask her about her father.") that

8   we included in the current study. These additional categories assisted comparability between the

9   results in the current study and those from Borders' research, because her samples also consisted of

10   neophyte practitioners.

11   As a measure of reliability, two assessors independently classified the data. The two

12   assessors had similar experiences in sport psychology and research. They had met through a mutual

13   acquaintance and shared an interest in the study topic. As such they shared a relationship without an

14   imbalanced power dynamic. For example, one did not supervisor the other or have a dependent

15   relationship. As we employed a coding framework to analyse the data, we calculated inter-rater

16   reliabilities (MacPhail, et al., 2018). The inter-rater reliabilities for the six dimensions were above

17   80% as recommended by Dole et al. (1981). The specific inter-rater reliabilities were 85% for time,

18   92% for place, 87% for focus, 83% for locus, 98% for orientation, and 86% for mode. When the

19   two assessors had different views, they discussed their opinions to reach an agreement, but when

20   they were unable to do so, we removed the relevant text units from analysis. The deleted text units

21   consisted of inaudible ("uh ha") or partial utterances ("really") that the assessors found ambiguous.

22   The data that support the findings of this study are available from the corresponding author upon

23   reasonable request.

24   **Results**

25   We identified 1290 internal dialogue statements with practitioners providing 764 and

26   athletes 526. We present the mean percentages and ranges of each category within the six

27   dimensions of Dole et al.'s (1981) framework in Tables 1 and 2. We have tabulated the TSPs'

results for both the first and third consultations in Table 1, with the equivalent athlete data presented

in Table 2.

TSPs' Internal Dialogue

Time. Just over half of the TSPs' internal dialogue in both consultations was focused on

present events. Examples of present focused internal dialogue included "this is not ground-breaking

stuff. but I think she likes it," "I feel confident talking about this," and "what is her motivation for

playing?" Practitioners focused approximately 30% of their internal dialogue on future events, both

in and after the current consultation. Examples of future oriented internal dialogue included "the

next few sessions will look at strategies relating to concentration and attention," "there will be days

when I'm a sport psych and I feel tired and have to work," and "fuck, here comes the weight issue."

The remaining internal dialogue was focused on past events and examples included "I wonder if she

played to her expectations?" "I remember that cold day and Dad was rubbing my hands," and "oh

that used to happen to me all the time."

Place. Across both consultations, practitioners focused approximately 80% of their internal

dialogue on in-session material. Examples included "I need further clarification," "I need to

summarise," and "I need to keep up with her story." Practitioners focused approximately 20% of

their internal dialogue on out-of-session material. Examples included "we need to organise times

for the next sessions," "I can't believe I did a presentation on this [topic] a few weeks ago," and

"there is no urgent need to see each other again."

Focus. Approximately 40% of the practitioner's internal dialogue was about the athlete and

examples included "she's asking me for my opinion," "just let her say what she feels," and "her

body language is still urgent around this." TSPs' focused around 40% of their internal dialogue on

themselves. Examples included "I am feeling more relaxed," "good summary and reflective

listening," and "how do I explain this question?" About 5% of the practitioners' internal dialogue

was about the relationships between themselves and the athletes. Examples included "I hope I

didn't destroy any of the working rapport we had generated," and "have I got a good enough

rapport and background info. to work with him?" Thoughts about supervisors included the

following statements: "I will show [my supervisor] that I have decent counselling skills," and "[My

supervisor] would have put up a huge neon sign here!" The remaining 15% of TSP internal

dialogue was about other topics and examples included "automatic or automated?" "What's the

time?" And "the old breathing technique – most people don't breathe properly."

Locus. Slightly more than 50% of practitioner internal dialogue was about observable events

and just less than 50% was focused on inferred traits and cognitions. Examples of internal dialogue

about observable events included "I need to not waffle," and "I am yawning." Examples of internal

dialogue about inferred traits and cognitions included "I wonder what she thought of that?" "She

likes positive reinforcement," and "bugger it, she needs to know I understand her sport."

Orientation. About 95% of practitioner internal dialogue was professional and relevant to

the consultation. Examples included "let's give a bit of dramatic self-disclosure," "I think I am

going overboard on this [topic]," and "that was such an interpretation." TSPs remaining 5% of

internal dialogue focused on personal issues not relevant to the consultation. An example was "[my

brother] has no clues, probably never will."

Mode. About 8% of internal dialogue was positive in tone and about 12% was negative.

Examples of positive statements included "good open question," "it's good she disclosed that," and

"good reflective listening." Examples of negative statements included "why did I ask 'how do you

interpret that?' Stupid question!" "I don't feel qualified," and "I am a dickhead!" Approximately

50% of practitioner internal dialogue was neutral in tone, and slightly less than 30% involved

planning statements. Examples of planning statements included "I really need to keep track of the

time," "I need to give a bit back, so she knows I'm listening," and "ask her about her week to

develop more rapport."

Athletes' Internal Dialogue

Time. Approximately 60% of athlete internal dialogue across both consultations concerned

currently occurring events. Examples included "she is giving me real direction," "she may be

getting at something," and "I like it when she sums things up." Athletes focused just less than 30%

of internal dialogue on past events and about 13% was about future events. Examples of internal

dialogue about past events included "I've been [performing] really well lately," and "have I left out anything that may be important?" Examples of future oriented internal dialogue included "It will be good to try some of these things [ideas] out," "I hope this routine will help," and "what have I got coming up in the next few weeks?"

Place. Approximately 65% of athlete internal dialogue focused on in-session content, whereas about 35% was about out-of-session material. Examples of in-session focused internal dialogue included "she is going to have a preconceived idea that I'm really good," "I can't really think of anything else to say," and "do I sound like a spoiled brat who gets upset when things don't go their way?" Out-of-session internal dialogue examples included "I've tried basketball, and I know I'm crap," "I remember how it felt when I became unfit," and "[player's name] is a good person to have on the team."

Focus. Just less than 50% of the athletes' internal dialogue was about themselves and examples included "I always am pretty self-critical," "I can't believe how much I couldn't be bothered playing," and "I felt a bit rushed." Athletes focused just less than 30% of their internal dialogue on the practitioner. Examples of internal dialogue about the TSPs included "she's made a good point," "I like her comment of making 'clear-cut' assertive comments," and "what she's saying makes sense." About 7% of athlete internal dialogue was oriented towards the relationships they had with practitioners, and examples included "I feel very comfortable talking to [practitioner]," and "[it's] amazing how easy it is to tell her this." Two athletes thought about their coaches during their second consultations. One athlete had one internal dialogue statement about her coach and thought, "[my coach] would like that." The other athlete thought, "not too many coaches have done a good job as far as I am concerned," "the coach will kill me and give me a hard time," and "the coach was really a pain in the arse." Approximately 15% of the athlete internal dialogue was about other topics. Examples included "work keeps getting more and more," "that was a good game," and "sport is great!"

Locus. About 50% of athlete internal dialogue referred to observable events, whereas 50% was about inferred traits and cognitions. Examples of internal dialogue about observable events

included "this session has been very long," and "hasn't she asked me that before?" Examples of

internal dialogue about inferred traits and cognitions included "some of my team mates probably

never understood the word team," "why do I actually play my sport?" And "[I] have not really

thought about that yet!"

Orientation. About 95% of athletes' internal dialogue was professional and relevant to the

consultations. Examples included "this [session] has been really helpful," "she's doing so well to

remember things about [my sport]," and "I hope I'm doing this right [a relaxation exercise]." Less

than 5% of athlete internal dialogue was about personal issues that seemed irrelevant to the

consultations. Examples included "I have to pick up mum," and "there is so much I have to do

tonight."

Mode. Slightly more than 20% of athlete internal dialogue was positive in tone, whereas

slightly less than 10% was negative. Examples of internal dialogue statements that were positive in

tone included "that was a really good technique," "wow, that was unreal, I can really feel and see

it," and "she is caring about what I am saying." Examples of internal dialogue statements that were

negative in tone included "now that I'm thinking about it, the apprehension is worrying me," and "I

am really nervous about my knee next Saturday," Approximately 65% of athlete internal dialogue

was neutral in tone and less than 5% involved planning statements. Examples of planning

statements included "let's get started," and "keep this answer short."

Discussion

In the current study, TSPs' retrospective accounts provided evidence that their in-session

internal dialogue statements were generally (a) present focused, (b) about in-session material, (c)

about the athletes or themselves, (d) about both internal and external events, (e) professional (i.e.,

related to the session), and (f) either neutral or planning statements. The athlete's retrospective

accounts indicated their internal dialogue statements were generally (a) present focused; (b) about

in-session material; (c) about themselves, and to a lesser extent the practitioners; (d) about both

internal and external events; (e) professional (i.e., related to the session); and (f) neutral. These

results provide a novel description of the internal dialogue that trainees and athletes experience

1   when collaborating.

2   The finding that TSPs' retrospective internal dialogue was neutral in emotional tone,

3   focused on present, professional, and in-session material, and contained planning statements is

4   consistent with results of previous research (see Nutt-Williams, 2008 for a review of the research).

5   Perhaps when TSPs' focus their internal dialogue on present in-session material, clients, and

6   service-delivery processes it reflects that they are listening to athletes' stories. The findings that

7   athlete's internal dialogue was professional, present-oriented, and in-session focused reveals that

8   they may have found the consultations engaging.

9   It is understandable that the TSPs thought about the athletes during the consultations.

10   Helping athletes with their issues was the primary purpose of the consultations. The TSPs also

11   thought more frequently about themselves than experienced therapists examined in previous studies

12   (e.g., Oddli & Halvorsen, 2014), and this difference might be expected. TSPs have previously

13   described a change from attending to their own in-session internal dialogue to including the

14   experiences of clients in service-delivery owing to reflection and experience (McEwan & Tod,

15   2023).

16   The percentages of internal dialogue focused on external and internal events were different

17   from those of some previous studies (e.g., Borders, 1989; Borders et al., 1988). The TSPs in the

18   current study thought about external and internal events with similar frequencies. Trainee

19   counsellors in some previous studies have focused more on internal events (e.g., Borders, 1989).

20   The topics that practitioners and athletes discuss may influence TSPs' internal dialogue (whether

21   positive or negative). The focus on sport in the trainee practitioner-athlete consultations may have

22   increased the frequencies that the TSPs thought about external behaviours and events, such as

23   performance. Researchers could further explore the factors that influence in-session internal

24   dialogue.

25   The variations in TSPs' internal dialogue frequencies were similar with those in previous

26   investigations (e.g., Borders, 1991). The measures used in the present and existing studies provide

27   evidence that participants varied in their internal dialogue. In this study, the trainee practitioners'

internal dialogue findings might have been understandable given their counselling backgrounds. For

example, TSPs with the highest frequencies of negative internal dialogue also had little counselling

experience compared with some peers in the sample. Much of their negative internal dialogue was

self-focussed, and examples included "I'm struggling here," "I am a dickhead," and "I don't feel

qualified." Researchers have also found that neophyte practitioners often doubt their counselling

abilities and feel inadequate when initially interacting with clients (e.g., Owton et al., 2014;

Rønnestad & Skovholt, 2012).

The TSPs with the highest levels of negative internal dialogue commented on being anxious

about their client interactions. For example, one participant with one of the highest levels of

negative internal dialogue in the third consultation said,

I probably felt more nervous in this last session than any of them [the previous

consultations], performance anxiety. I suppose because I felt like I was on camera, I had to

show some significant progress today, that we had worked on something really great that

had come off. She had to go away with something. That's just my own stupid expectations

on myself.

A relationship could exist between TSPs' negative internal dialogue and their anxieties; it was not

our intention to investigate any relationships between internal dialogue and practitioner anxiety.

Researchers could complement in-session internal dialogue data by collecting information about

participants' perceptions of their internal dialogue.

On most of the dimensions in the Dole et al (1981) scoring system, the TSPs' retrospective

internal dialogue accounts were like those of trainee counselling psychologists (e.g., Borders,

1991). In addition, other in-session internal dialogue findings from psychotherapy research also

have parallels with sport psychology. For example, TSPs' in-session internal dialogue reflects

findings such as service-delivery experience, perceived helpfulness, perceived counselling

performance, and ego development that have emerged from counselling psychology research (Nutt

Williams, 2008; Nutt Williams & Fauth, 2005). There is scope for researchers to examine the extent

that psychotherapy in-session internal dialogue findings apply to sport and exercise psychology.

Our findings reflect the dynamic interplay between intuitive spontaneous internal dialogue and goal-oriented dialogue (Latinjak, 2019). Spontaneous internal dialogue came in the form of cognitive reactions to the unfolding practitioner-athlete dialogue and was mostly a reflection of other psychological processes (e.g., processing tasks the person needed to attend to later that day) (Latinjak et al., 2020). The spontaneous internal dialogue refers to participants' more uncontrolled thoughts, such as things that come to mind unwillingly (Fritsch et al., 2022). Goal-oriented internal dialogue was part of the participants self-regulation processes, such as trying to make progress with the client and involved reasoning and decision-making (Latinjak et al., 2019) (e.g., trainees telling themselves to summarise, to keep the client on track).

The current study extended literature by examining clients' and TSPs' internal dialogue. We might further extend knowledge about what occurs during TSPs' athlete consultations by drawing on relevant counselling psychology literature. For example, Williams (Nutt Williams, 2008; Williams, 2020) has broadened her research on internal dialogue by advocating for more process research examining areas such as practitioners' self-awareness and reaction management strategies. Findings have provided evidence that trainee counsellors experience a range of emotions and critical internal dialogue during client interactions, some of which interfere with their service-delivery abilities (e.g., McEwan & Tod, 2023). Adopting a client focus, self-coaching and self-disclosure, and suppressing their feelings are strategies neophyte practitioners use to manage their personal reactions (Nutt Williams, 2008). TSPs might learn about ways to manage their emotions, internal dialogue, and personal reactions by reading Williams' work (e.g., Morgan & Nutt Williams, 2021). In addition, research, which examines TSPs' experiences and self-management strategies, might yield ways that Williams' work is applicable to sport and exercise psychology service-delivery.

Some issues regarding the scope of the current study's results warrant further consideration. For example, participants' awareness of partaking in the current study may have influenced their behaviour, internal dialogue, and emotions during the practitioner-athlete consultations. It is difficult to conceive of ways to examine in-session internal dialogue without possibly distorting

practitioners' and athletes' behaviour, thoughts, and feelings somewhat. In these instances,

reactivity may occur, where participants may modify their behaviour in response to the researchers

asking them to report their internal dialogue (Double & Birney, 2019). Further, with the

interviewer's presence during the thought-listing exercise, participants ironically may have censored

some of their thoughts and self-talk. Participants did not have a dependent relationship with the

interviewer. The interviewer was not one of their lecturers, supervisors, assessors, or classmates.

Instead, participants knew little about the interviewer other that the individual had an interest in

sport psychology and was conducting research in the area. Although difficult to overcome

reactivity, researchers may consider conducting thought-listing exercises over more than one

occasion to help participants become comfortable with the process and experience less reactivity.

Authors make similar recommendations in other verbal reporting methods such as Think Aloud

(TA). TA involves participants verbalising what they are thinking concurrently during a task.

Recent works using TA (e.g., Birch & Whitehead, 2020) could support methods of data collection

and examination of practitioner's in-session internal dialogue. For example, Birch and Whitehead

(2020) emphasise the importance of 'warm up' exercises to ensure that participants are familiar

with verbalising their thoughts aloud.

Collecting internal dialogue data retrospectively is another limitation. Some factors could

influence participants' retrospective accounts. First, the reflections participants had between the

athlete-practitioner consultations and the thought-listing exercises may have affected their

responses. It was desirable, but not practical in this instance, to complete the thought-listing

exercises immediately after the practitioner-athlete consultations. Memory decay influences

reporting accuracy of any kind of retrospective reporting (Ericsson & Simon, 1993). The

participants' retrospective accounts may have differed from their actual in-session internal dialogue,

but the degree of distortion is unknown. To progress the current work, researchers could ask

participants to verbalise what they are thinking concurrently (i.e., think aloud) during service-

delivery. Researchers could achieve this by taking advantage of increased online service-delivery

post-pandemic. For example, it may be possible to record practitioner's in-the-moment experiences

1   during online consultations where the practitioner mutes her or himself to record their internal

2   dialogue. This approach could be examined using timed intervals (e.g., 5 mins) or at more natural

3   turning and stopping points in the athlete-practitioner exchange. Such a methodological

4   development would allow for more immediate and potentially more accurate internal dialogue than

5   the postsession retrospective thought-listing procedure. Furthermore, it would demonstrate how

6   practitioners typically listen using multiple channels simultaneously to process information such as

7   client external manifest content and practitioner internal manifest content.

8   Our final consideration related to the scope of the current study's results is the use of

9   frequencies. Frequencies do not indicate the meaningfulness of internal dialogue (see Krane et al.,

10   1997). For example, in the current study about 50% of practitioners' and 65% of athletes' internal

11   dialogue was neutral in emotional tone whereas less than 10% was negative for both groups.

12   Possibly, however, negative internal dialogue (e.g., "I am a dickhead") had more influence on

13   participants' emotions than neutral statements (e.g., "we need to organise times for the next

14   sessions").

15   **Future Applied Research**

16   Potentially, thought-listing procedures have several uses for sport psychology professionals

17   beyond examining internal dialogue and justifies future research. Instead of asking participants to

18   record their internal dialogue, we could focus on questions about the critical issues they believe

19   athlete-clients raised. Thought-listing procedures may help investigators study how practitioners of

20   varying experience levels react to stimuli such as specific athlete behaviours. For example, we

21   might expand our perspective on practitioner cognition by repeating the thought-listing exercise

22   with people at divergent phases in their career (e.g., early, middle, late). We might find distinct

23   types of thoughts along with varied management strategies depending on individual's career phase.

24   As applied sport psychology is a helping process made up of a series of judgements and

25   decisions (Martindale & Collins, 2013), there is scope to use thought-listing procedures to act as

26   formal reflection exercises and to develop practitioners' awareness of their thinking, for example in

27   relation to case conceptualisations and intervention plans. Practitioners may find thought-listing a

useful exercise in articulating events in service-delivery to provide perspective (e.g., recording

one's thoughts and listening back) for critical examination purposes. This process could facilitate

the development of individual's case conceptualisation skills. This would encourage practitioners to

reflect on their 'in-action' reflections (Cropley et al., 2023). From an athlete perspective, the use of

thought-listing could develop practitioner's understanding of athlete-clients' experiences of service-

delivery (e.g., Bell et al., 2020). Although we did not share athletes' thoughts with the TSPs,

researchers and supervisors could do so for scientific and educational reasons. For example,

researchers could compare what practitioners thought athletes were thinking with what athletes

reported they were thinking, and such investigations could examine how attuned the two parties are

during service-delivery. During supervision, learning about athletes' cognitions during service-

delivery may provide opportunities for TSPs to develop their ability to empathize and help clients.

There is potential to support sport psychology educational processes through thought-listing

procedures and provide scope for educational research. For example, some supervisors and

supervisees may watch recordings of trainees' athlete consultations during supervision sessions

(e.g., Hutter et al., 2017). Studies on the use of thought-listing procedures during sport psychology

supervision may provide information that helps professionals learn ways to make optimal use of the

method. Qualitative case studies can document supervisees' and supervisors' experiences and

functions of thought-listing procedures. In longitudinal studies, investigators could examine the

types of influences thought-listing have on subsequent practitioner behaviour.

1   Table 1

2   *TSPs' Internal Dialogue in the First and Third Consultations (Expressed as Percentages)*

Internal dialogue dimension	First consultation		Third consultation	
	Mean	Range	Mean	Range
Time				
Past	14.9	10.3 - 18.3	18.7	10.0 - 29.4
Present	51.8	44.7 - 59.2	54.1	46.8 - 63.0
Future	33.3	23.2 - 44.7	27.3	21.2 - 31.3
Place				
In-session	79.7	53.9 - 95.0	81.2	61.7 - 93.3
Out-session	20.3	5.0 - 46.2	18.8	6.7 - 38.3
Focus				
Athlete	38.2	23.7 - 60.0	46.1	23.5 - 74.3
Practitioner	38.8	25.0 - 55.2	35.3	8.6 - 58.8
Relationship	6.3	0 - 12.9	4.4	0 - 8.3
Supervisor	0.3	0 - 1.6	0.0	0 - 0
Other	16.5	10.0 - 25.6	14.2	7.3 - 21.3
Locus				
External	53.9	40 - 63.2	51.0	37.1 - 63.5
Internal	46.1	36.8 - 60.0	49.0	36.5 - 63.0
Orientation				
Professional	93.8	79.5 - 97.5	95.9	87.2 - 100.0
Personal	6.2	2.5 - 20.5	4.1	0 - 12.8
Mode				
Neutral	47.0	32.8 - 60.8	54.6	40.8 - 62.9
Planning	34.7	20.8 - 44.7	23.4	12.9 - 29.3
Positive	5.5	0 - 10.4	9.9	0 - 22.4
Negative	12.2	5.3 - 19.5	12.5	8.6 - 17.6

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1   Table 2

2   *Athletes' Internal dialogue in the First and Third Consultations (Expressed as Percentages)*

Internal dialogue dimension	First consultation		Third consultation	
	Mean	Range	Mean	Range
Time				
Past	29.0	21.2 - 38.2	26.36	5.6 - 37.3
Present	58.2	46.7 - 68.8	60.6	34.9 - 88.8
Future	12.7	5.0 - 26.7	13.1	5.6 - 32.6
Place				
In-session	71.2	25.8 - 93.3	58.4	20.9 - 91.7
Out-session	28.9	6.7 - 74.2	41.9	8.3 - 79.1
Focus				
Athlete	52.4	40.0 - 80.9	45.7	19.4 - 60.5
Practitioner	27.0	7.9 - 43.8	29.5	2.3 - 63.9
	9.5	0 - 26.7	6.0	2.8 - 14.0
Relationship				
Coach	0.0	0 - 0	1.3	0 - 5.1
Other	11.1	0 - 28.6	18.1	11.1 - 30.4
Locus				
External	50.0	35.0 - 61.7	49.0	37.0 - 59.3
Internal	50.0	38.3 - 65.0	51.0	40.7 - 63.0
Orientation				
	98.0	93.6 - 100.0	95.7	85.7 - 100.0
Professional				
Personal	2.0	0 - 6.4	4.3	0 - 14.3
Mode				
Neutral	65.0	60.0 - 66.7	66.0	60.6 - 71.2
Planning	4.1	0 - 13.3	3.3	0 - 7.4
Positive	20.4	7.9 - 27.5	21.9	8.9 - 34.4
Negative	10.1	0 - 21.35	8.8	0 - 17.7

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