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## Insights on the Process of Using Interpretive Phenomenological Analysis in a Sport Coaching Research Project

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### Abstract

Interpretive Phenomenological Analysis (IPA) is a qualitative research methodology used to understand participants' subjective realities through personal interpretations of their lived experiences and the meanings they attach to these experiences (Smith, 2011). IPA has been used predominantly in health psychology, with rising interest within the field of sport psychology and coaching. This article seeks to describe insights about the processes of IPA by a research team using the methodological approach for the first time. These experiences are shared against the backdrop of research exploring the lived experiences of Masters athletes within the context of coached competitive swim programs. We describe how the multiple facets of IPA influence the refinement of the research question, the planning and implementation of data collection, and data analysis and interpretation. We elaborate on our perceptions of the complexities of IPA and make recommendations for how future research teams might smoothly navigate the rigorous research process to yield rich in-depth data and interpretations.

### Keywords

IPA, Qualitative Research Methodology, Sport Coaching, Data Collection, Individual Level Analysis, Group Level Analysis

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## Insights on the Process of Using Interpretive Phenomenological Analysis in a Sport Coaching Research Project

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*Interpretive Phenomenological Analysis (IPA) is a qualitative research methodology used to understand participants' subjective realities through personal interpretations of their lived experiences and the meanings they attach to these experiences (Smith, 2011). IPA has been used predominantly in health psychology, with rising interest within the field of sport psychology and coaching. This article seeks to describe insights about the processes of IPA by a research team using the methodological approach for the first time. These experiences are shared against the backdrop of research exploring the lived experiences of Masters athletes within the context of coached competitive swim programs. We describe how the multiple facets of IPA influence the refinement of the research question, the planning and implementation of data collection, and data analysis and interpretation. We elaborate on our perceptions of the complexities of IPA and make recommendations for how future research teams might smoothly navigate the rigorous research process to yield rich in-depth data and interpretations. Keywords: IPA, Qualitative Research Methodology, Sport Coaching, Data Collection, Individual Level Analysis, Group Level Analysis.*

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Interpretive Phenomenological Analysis (IPA) is a qualitative approach to understanding participants' lived experiences in order to describe what a topic is like for them within a specific context (Larkin, Watts, & Clifton, 2008; Smith, 2004). However, IPA extends simple description and makes sense of participants' lived experiences by developing an interpretive analysis of the description in relation to social, cultural, and theoretical contexts. Thus, the analyst offers "an interpretive account of what it means for the participant to have such concerns within their particular context" (Larkin et al., 2008, p. 113). Insights and lessons learned about processes involved in IPA by a group of researchers exploring lived experiences of Masters athletes within coached environments may help advance this methodology within our field of research.

### Using Interpretive Phenomenological Analysis

IPA is informed by three key positions: phenomenology, hermeneutics, and idiography (Smith, Flowers, & Larkin, 2013). Phenomenology describes the "what" and "how" of individuals' experienced phenomena, develops descriptions of the essences of experiences, but does not explain or analyze descriptions (Creswell, 2013). Hermeneutics is a theory of interpretation concerning textual meaning, as in the techniques used in speaking and writing that divulge the intentions and context of the speaker/writer (Smith et al., 2013). Finally, idiography relates to details and thorough analysis of small cases, which differs from mainstream psychological studies that are nomothetic in nature (Smith et al., 2013).

Smith (2004), a pioneer in IPA research in health psychology, noted that four key characteristics of IPA research stem from the three positions noted above. Firstly, IPA is idiographic because a detailed analysis of one case occurs before moving onto the next. Secondly, IPA is inductive, meaning research questions are broadly constructed to allow for unanticipated themes to emerge. Interplay between induction and deduction in data analysis may exist; however the inductive approach takes precedence. Thirdly, results are discussed using existing literature, creating an interrogative element. Finally, IPA researchers are influenced by their biographical backgrounds and knowledge of extant literature and must interpret data through their own lens when developing themes (Smith, 2004).

Larkin and colleagues (2008) recommend that researchers be open to adjusting their ideas and responsive to interpretations of data based on participants' responses. Researchers should understand that participants' experiences are within a specific context, which relates the person to the phenomena at hand (person-in-context) (Larkin et al., 2008). Aligning with an interpretative tradition, IPA includes a double hermeneutic: the researcher tries to make sense of the participant trying to make sense of their experiences (Smith, 2004; 2011). Readers interested in knowing more about the philosophical underpinnings and history of IPA development are referred to Smith (1996) and Smith and colleagues (2013).

Smith (2011) developed guidelines for judging the quality of IPA studies. He noted that IPA studies should have a clear focus that provides detail of a particular topic, the analysis should be descriptive and interpretative and include both convergence and divergence in themes, and papers should be carefully written to account for these guidelines. Although helpful, these guidelines specifically aid with assessing *products* of IPA research, and can only provide indirect judgment on the *process* of research (Smith, 2011). The process of IPA research, especially with regards to research in sport psychology and coaching, has not been clearly explored.

### **Interpretative Phenomenological Analysis in Sport Studies**

In a critical analysis of 293 IPA studies in health psychology between 1996 and 2008, Smith (2011) found only seven sport and exercise related studies using IPA methodology. Since then, several IPA studies in sport psychology and sport coaching have been published (e.g., Caron, Bloom, Johnston, & Sabiston, 2013; Levy, Polman, & Nicholls, 2009; McDonough, Sabiston, & Ullrich-French, 2011; Tamminen, Holt, & Kacey, 2013; Tawse, Bloom, Sabiston, & Reid, 2012). These studies varied in purpose. In each article, authors briefly described multiple steps in the analysis process that enabled them to create themes, explore convergence and divergence in participants' data, and develop interpretations. The difficulties encountered in the process were not described, thus, the reader is left with a series of somewhat similar steps of gathering and analyzing data (albeit some incongruency as well) and questions regarding the effort of using the methodology. Giorgi (2011) criticized Smith's methodological procedures in IPA since "IPA's hesitation to claim fixed methods makes the possibility of replication of IPA studies impossible" (p. 195). While we are not suggesting methods need to be fixed, a more detailed account of processes involved in IPA by a team of researchers would enable first-time users of this approach to gain a deeper understanding of the basic steps and challenges involved.

To elaborate on the processes used by the five studies in sport psychology and coaching, data analysis began in all cases with analysis of each participant's transcript. Most papers noted that the primary researcher kept a reflective journal. In certain studies, one author did the complete analysis while co-authors became involved at a broader level (i.e., deciding what categories were included into themes or classifying themes of each athlete into groups of collective themes; Caron et al., 2013; McDonough et al., 2011; Tawse et al., 2012). In another

study, researchers used peer debriefing by having both second and third authors independently conduct IPA analyses on all transcripts (Levy et al., 2009), but descriptions of how this was accomplished were vague.

Use of IPA methodology in sport psychology and coaching appears to be on the rise. Still, there has been little exploration of the actual process of conducting IPA in new domains. The lack of transparency of the process, perhaps due to space restrictions in published manuscripts, leaves other researchers unsure of the mechanics for using this methodology within sport psychology and coaching research, especially when in research teams. It is not always clear that the citations included in these manuscripts (e.g., Smith et al., 2013) are meant to substitute the explanation of their individualized processes of IPA. Therefore, the purpose of this paper is to describe insights and lessons learned about the processes involved in IPA by a research team using the methodological approach for the first time. These experiences are shared against the backdrop of research using IPA to explore lived experiences of Masters athletes (i.e., older adult athletes, all over 45 years-old) within the context of coached competitive swim programs. We elaborate on our team's experiences navigating steps of the research process, beginning with the identification of our research question and ending with data analysis. We offer general insight on using IPA while providing recommendations for other research groups considering IPA. Team-based or consensual qualitative research has been examined elsewhere (e.g., Guest & MacQueen, 2008; Hill et al., 2005), but not within IPA research. This paper is not meant to be a matter-of-fact guide on how research groups may conduct IPA in the sport psychology and coaching domain, rather we hope that sharing our experiences might be viewed as our introspection on using IPA. Further, readers might find our sharing informative and illustrative of our concerted efforts using this methodology for the first time.

This paper is timely on a professional level as our team's doctoral student researcher presented our methodological steps and recommendations at a conference (Rathwell, Callary, & Young, 2014) and received many questions and feedback from students and professors alike who were interested to know more about the process of using IPA, its challenges and remunerations. Consequentially, the doctoral student researcher wrote a reflection on his presentation and the questions asked. The doctoral student researcher's reflections, presented as quotes, are used to scaffold discussion throughout this paper. Deliberations and introspections by all three team members on the mechanics of how we employed IPA became integral to our discussion.

## **Our Experience**

### **Preparing the IPA Study**

Our team discovered IPA while developing research questions and seeking an approach to best answer them. Grounded theory and phenomenology were originally researched, but we wanted a methodology for interpreting meaning from experience. As we read further into IPA, the scope of the approach helped refine our research questions, participant selection criteria, and method of data collection. Our research question changed from:

- a) From the perspectives of sport participants, what are the psycho-social particularities of coaching older adults?

to:

- b) What are the lived experiences of older adult athletes with coaches, and how does this translate into understanding what they need and want from their coaches?

While this interrogative shift may appear minor, it created an emphasis on the lived experiences of participants, framed broadly and openly, further encouraging us to explore how participants perceive their situations (Smith & Osborn, 2003), which enabled us to clarify our selection criteria when recruiting participants.

Typically, IPA involves detailed analysis of verbatim accounts of a small number of participants (typically under 10), usually through semi-structured interviews (Larken et al., 2008; Smith, 2004). IPA researchers are interested in relatively small sample sizes so they can explore each case with the necessary time, energy, and rigour required for this type of analysis (Smith & Osborn, 2003). Purposive sampling techniques ensure a homogenous sample of participants with common characteristics and experiences (Smith & Osborn, 2003). We included 10 participants in our study and strove for a degree of uniformity across cases, whereby all athletes were between 45 and 65 years of age, from one sport (swimming), and had a competitive focus. To ensure these criteria were met, we created a screening page that was delivered with the recruitment text given to athletes. Only athletes who fit the screening criteria and expressed interest were selected. Apart from age and sport qualifications, participants' were screened to ensure they were registered for competitions, trained for competitions with registered coaches, and believed training was integral for success in competitions.

Next, we needed to develop our semi-structured interview guide. We feel there is value in sharing the evolution of our guide as this was not described in any IPA article we have read. Here we encountered our first challenge of using IPA. While developing this guide, it became clear that each member of our research team had various experiences that influenced the types of questions we wanted to ask. For example, the first author had a background in qualitative research in coach development and lifelong learning; the second author focused his research in coaching leadership behaviours; and the third author had a relatively quantitative research portfolio, especially focusing on Masters athletes and understanding coaching effectiveness. For this reason, as the principle investigator, I suggested we each reflect on this topic and write about our own experiences, assumptions, and biases as a bracketing exercise. Indeed, researchers have motives and biases based on their own biographies and contextual experiences (Fontana & Frey, 2005), and it was deemed important to our research team to explore these motives and understand their impact.

Moustakas (1994) suggests *bracketing* allows researchers to set aside their experiences and take a fresh perspective. Assumptions and implications should be clear and explicit when interpreting data in IPA studies (Chamberlain, 2013). However, Allen-Collinson (2009) noted it is impossible to bracket one's biases completely, but the process allows researchers to suspend their assumptions and "adopt a more self-critical and reflective approach in research" (p. 286). We did not want to suspend our biases from the research (bracketing out biases), as IPA includes an interpretative element. Instead, we wanted to understand how our taken-for-granted assumptions about the topic might inform our approaches (bracketing in biases).

We answered the following questions, in approximately five pages double-spaced per researcher: "What are my beliefs about coaches? How have my previous experiences shaped these beliefs? What are my beliefs about Masters athletes and how they train, or their coaching needs? Why do I think that?" Before writing, as recommended by Moon (2006), we looked over the questions and reflected on them. After reflecting, we wrote our personal experiences regarding the questions, left them for a few days, and finally reflected on our reflection. In this way, we deepened our reflection on the topic (Moon, 2006). We also explored each of our

methodological research backgrounds to further understand our epistemological approaches and clarify how we wanted to proceed with this study. By bracketing our experiences, we showcased potential biases that shaped our interpretation of the data, but were also able to bracket in how our experiences might enrich the interpretations. We recommend this bracketing exercise as it was an essential tool used in multiple stages of our research project.

After we bracketed our experiences and beliefs, we resumed our task of developing and refining our semi-structured interview guide. While all members of our research team took part in creating the guide, we first invited our doctoral student researcher to independently think of questions to help him learn how to strategically ask questions based on the study's purpose and methodology. When considering the construction of an interview guide, Smith and Osborn (2003) recommend exploring broad areas and then sequencing the guide so that it covers the most sensitive topics later in the interview. By doing so, researchers have time to build rapport with participants so that they feel comfortable speaking in depth about the most pertinent subjects. Akin to Tawse et al.'s (2012) approach, we constructed open-ended questions with prompts to help trigger participants' specific experiences related to each research question. "Good interview technique therefore often involves a gentle nudge from the interviewer rather than being too explicit" (Smith & Osborn, 2003, p. 61). As the doctoral student researcher on our team noted:

A particular challenge that I faced was to create questions that were phrased in a fashion to capture subjective realities of the participants without pushing my agenda. For example, when I first sat down and was staring at a blank paper, my thought was to ask, "What coach behaviours are important to you?" Upon reflecting on this question and consulting my bracketing document, I noticed that this question was riddled with my biases from my prior research on coaches' leadership behaviours and was not phrased in an appropriate manner to capture our participants' subjective realities. As such, I revisited my questions and re-structured them in a way that was better suited for IPA research.

Examples of these refined questions were: "What does having a coach mean to you?" and "What is important to you about having a coach?" We note that it is important when constructing an interview guide that researchers should always question the integrity of their interview questions by referring back to their bracketing document. Further, it is ethically important to phrase questions in a manner that is not leading and that is open to participants' ideas of what is most important (Callary, 2013).

### **Collecting Rich and Personal Data on Participants' Lived Experiences**

We invested significant time constructing our interview guide to ensure that the wording and sequence of questions were well constructed. Despite feeling confident collecting data, interviews did not originally go exactly as planned. As the doctoral researcher noted:

At the beginning of my first interview, I soon realized that all the participant was speaking about was broad, group-based, hypothetical accounts. I became aware very quickly that acquiring the type of accounts that are needed for IPA would require some work.

Fortunately, we had identified potential probes that would facilitate the procurement of lived experiences and the meanings participants attributed to them. Smith and Osborn (2003) discuss

*funneling*, a technique to go from a respondent's general views about a topic to more specific experiences. Utilizing probes, the student noted:

I was able to construct a three-step process that salvaged the interview and resulted in the acquisition of very rich data to work with. The three-step process adhered to the following sequence: (1) personalize, (2) understand meaning, and (3) acquire lived experience.

For example, the researcher asked a participant, "What does having a coach mean to you?" A typical answer would be, "Oh, you know us Masters athletes, we just want someone who makes us feel confident." This answer did not capture a lived experience, nor was it personal or specific, but a comment about the broader cohort. To personalize the response, a funneling probe ensued, "I am understanding that feeling confident is something that most Masters athletes want. Is this something that *you* want?" The participant would reply, "Oh yes, it is incredibly important to me that my coach makes me feel confident." To understand the meaning of the experience or phenomenon, the researcher asked the participant next, "Can you describe what you mean when you say 'feeling confident'?" The participant would reply, "Feeling confident for me is to know that my coach believes in me and that I can accomplish what I set my mind to as long as I put in the effort." Still, there remained a final step which involved eliciting an example from the participant by asking, "Can you give me an example of when you felt your coach believed in you, and that made you feel like you could accomplish a goal within the context of Masters swimming?" At this point, the participant would provide a lived experience that profoundly exemplified their original answer. This process helped facilitate the discussion to reach a deeper, personal level of description and illustration.

We used another strategy to ensure rich and personal information by prompting participants ahead of their interview about the importance of discussing their personal experiences. The researcher instructed, "I want you to understand the point of this interview is to capture your specific lived experiences; therefore I am going to encourage you to use 'I' statements instead of 'we' statements. This is your time to speak about your own experiences, wants, and needs without having to consider others."

Data collection continued smoothly with 10 participants, with each interview lasting approximately one hour. We collected a total of 140 single spaced pages of transcripts. Individual transcripts were sent to each participant to confirm that they faithfully represented the conversation. No participants indicated problems with transcripts.

### **Analyzing the Data**

The analysis of our qualitative data followed a sequential manner, beginning with analysis at an individual-level (i.e., person-by-person) for each of the 10 individuals before proceeding to a group-level analysis that brought together data spanning all 10 individuals.

#### **Individual Level Analysis**

Each interview transcript was entered into NVivo 10 computer software program (Qualitative Solution and Research, 2010) and subsequently coded through this program. Smith and Osborn (2003) noted that a meticulous case-by-case analysis of individual transcripts can be a lengthy process. IPA dictates that each interview will be analyzed separately to find emerging themes before examining across the interviews (Smith, 2004). Via a literature review of other IPA studies in sport (e.g., Caron et al., 2013; McDonough, et al., 2011; Tamminen et al., 2013), and our research on IPA methodology (e.g., Larkin et al., 2008; Smith et al., 2013)



we determined that each team member would separately read the transcript of the first interview as a whole. Then each member completed a line-by-line analysis of the transcript to code for the participant's experiences based on the research questions. Coding allowed each researcher to find patterns in the text and place those pieces of text together in meaningful categories (Patton, 2002). Thus, each member separately organized coded texts into inductive themes. We analyzed data in three ways (Smith et al., 2013): (i) descriptive experiences; (ii) the manner in which participants described their experiences (i.e., their use of the word 'I' versus 'they', pauses, laughter); and (iii) our interpretations about how participants understood the experiences they described. Patton (2002) noted that when more than one person is analyzing data, a coding scheme may be developed independently and then compared to discuss similarities and differences. Thus, the three members compared and contrasted the resulting analyses of the first transcript. Discussion continued until an agreed set of themes and supporting quotes were identified.

A *consensus chart* of codes, which included code names and operational definitions grouped together under themes, was created for participant one. This was crafted by merging similar codes from each of the three researcher's separate analyses, while also allowing for unique codes to remain. Next, one team member performed a second analysis of participant one's transcript and deductively verified the positioning of codes amongst the identified themes. Many codes transferred easily into the consensus chart. Finally, all team members scrutinized the quotes related to each theme in the consensus chart and provided feedback about coding and interpretations. When disagreements arose about the placement of quotes in themes, alternate points of view were discussed by all three researchers, and in each case were resolved by a consensus decision on where to place the quotes. After completing participant one, this entire process was repeated for the transcript of participant two, allowing for novel themes to emerge.

Once all three team members agreed on the analysis process of the transcripts, all three members read the remaining transcripts (participants three through 10) and immersed themselves in the data, but only one member performed a line-by-line analysis of the data to code for inductive themes for lived experiences. Co-researchers reviewed the themes and supporting codes and provided feedback, often raising ideas for alternate themes. All three team members met and discussed the data. We resolved any disagreements by a consensus decision. One by one, a consensus chart for each participant was created. Each time, one team member performed a second analysis of each transcript and deductively placed their quotes amongst the identified themes in their specific consensus chart. All team members reviewed each consensus chart and associated quotes, and met to discuss any disagreements. These were resolved by a consensus decision. Each participant had between 57 and 125 quotes that fit into approximately 6 themes. This process for individual-level analysis lasted 10 weeks, with a 2-3 hour long meeting weekly, preceded by 2-3 hours of preparation time weekly per research team member.

### **Group Level Analysis**

As recommended by Smith and Osborn (2003), one team member listed all themes that were coded in each transcript, examined all themes' operational definitions to find ones that were similar across all participants, and combined similar themes under five broad higher-order themes. Smith (2011) recommends four or five themes, in order to give justice to each theme in writing manuscripts. The team met and discussions continued until we reached 100% agreement on the names and operational definitions of the themes and how sub-themes fit under the higher-order themes. We then created a coding chart to use for the group level analysis.

Next, one team member reorganized the themes in NVivo 10 to fit the agreed upon coding chart, which created a “code book” of all the quotes in each higher-order theme according to the sub-theme that the quotes supported. This book was 193 pages long with a total of 686 quotes. Separately, all three team members checked each quote to ensure it fit its new theme (Smith & Osborn, 2003). Operational definitions were carefully created to account for the various sub-themes. The group met to discuss quotes that did not properly fit in their new themes and operational definitions, to better place these quotes within the new structure. During group-level analysis, when group members worked together towards finding consensus and fit of supporting quotes in these higher-order themes, much time was spent expanding, delineating and delimiting operational definitions pertaining to these higher-order themes to ensure their coherency with constituent supporting quotes. In the end, each resultant theme had between 90 and 205 quotes from all 10 participants. Through NVivo’s Node Summary Report, the number of quotes and number of participants who were quoted were recorded in each theme to provide evidence of the prevalence and density of themes, as recommended by Smith (2011). See Table 1 for a breakdown of themes and sub-themes. The analysis at the group level lasted five weeks, with a 2-3 hour meeting weekly, with 2-3 hours of preparation time per team member weekly.

**Table 1.** Number of Quotes per Theme, Sub-Theme, and Participant

Theme	Benefits of having a coach (92)		Characteristics of the coach (205)			Instruction (163)		Planning structural elements (136)		Competition (90)		Total
Sub-theme	Swimming (49)	Non-swimming (43)	Experience (95)	Attributes (63)	Behaviors (47)	Feedback (84)	Strategies (79)	Practice (113)	Program (23)	Prep for comp (71)	During comp (19)	686
Name												
Whitney	2	0	6	12	11	5	6	12	2	9	3	68
Beth	12	2	14	14	3	2	5	21	0	4	0	77
Martin	7	3	6	0	0	18	4	16	1	3	3	61
Jordan	6	1	7	5	7	16	10	12	0	3	1	68
Darren	3	2	12	14	12	2	15	9	2	10	2	83
Catherine	2	22	3	2	0	8	7	2	4	3	2	55
Max	2	1	25	8	2	14	18	16	9	13	1	109
Lorna	2	5	6	3	3	6	5	4	1	11	5	51
Justin	2	5	6	1	3	5	2	8	2	5	2	41
Kelly	11	2	10	4	6	8	7	13	2	10	0	73

Note. All numbers represent the number of quotes in each theme/sub-theme

## Challenges and Strategies in IPA Data Analysis

The team analysis process was not without challenges. Although it was important to put aside the coding from the previous transcripts in order to respect the convergences and divergences in the data (Smith et al., 2013), we found it very difficult to “forget” what we had coded in past transcripts. A helpful strategy we used was to challenge our coding and ask ourselves whether we created specific codes because they were emerging inductively from that specific data set, or whether we had deductively coded it from an established theme in a previous transcript and/or a bias identified in our bracketing document. In doing so, we were better able to inductively code each transcript.

Having multiple coders also proved challenging at times. Each coder invested a significant amount of time creating his or her own interpretation, which led each to want their

interpretation to remain. We did not encounter any impasses in coming to consensus with our analyses. However, we did spend considerable time developing sound operational definitions for themes, which enabled us all to feel confident in where we placed the quotes. We spent roughly 40 hours in meetings analyzing the individual and group levels. These meetings largely happened over Skype, as we did not reside in the same city. Therefore, it was important to be patient, open to other interpretations, and to welcome challenges to each of our analyses.

We returned several times to our bracketing document to review how our biographies influenced our interpretations. With our bracketing documents in hand, we engaged in open dialogue and challenged each other's interpretations while presenting other viable interpretations. For example, we wrestled with one higher-order theme, initially calling it "coaching behaviors," in which "leadership style" was a sub-theme, as per the doctoral student researcher's past research experience in coach leadership. This was changed to "coach attributes," in which particular characteristics of the coach were analyzed, as per the first author's past research experience in coach biographies. In doing so, we separated coach behaviors into its own higher-order theme as "coach behaviors that maximize efficiency and hold athletes accountable," as per the third author's interest in coach effectiveness. However, none of us were completely satisfied with how the quotes fell into these higher-order themes. We finally came to consensus by arriving at a new category entitled "characteristics of the coach" that included sub-themes: "personal attributes of the coach" (shortened to "attributes" in Table 1), "coaches' accumulated experiences and resources" (shortened to "experiences" in Table 1), and "behaviors that exemplify coach credibility" (shortened to "behaviors" in Table 1), in which all our various interpretations fit.

Further, we debated various individual quotes and their placement within themes. For example, one quote debated was:

What I really look for is a coach that understands what you as an individual want from the Masters program. Because everybody comes at it from a different perspective. At the club, we have people who are highly competitive, we have some people who have no interest in entering in a competition whatsoever, some of them are there for improving their times, others are there for fitness, weight control, whatever it might be.

As we discussed where to place this quote, we consulted our bracketing documents to understand each other's areas of expertise and biases. One team member suggested this quote could fit under a theme regarding "giving individualized coaching" in which coaches must learn to manage athletes while understanding that each person brings their own biography, and a long one at that, to their perceptions of what they learn at the pool. This biography is based on experiences throughout their lifetimes that influence the ways they perceive new knowledge and learn (Callary, Werthner, & Trudel, 2011; Jarvis, 2009). Another team member suggested that using this lifelong learning lens limited how coaches could interpret athletes' motivational inclinations. He suggested the quote could be interpreted as "autonomy supportive" coaching: The coaches may be attempting to reinforce athletes' persistence in swimming by providing information and opportunities consistent with self-determined motives (Mageau & Vallerand, 2003; Pelletier, Fortier, Vallerand & Brière, 2001). Another was concerned that this would lead to subsequent discussion framed within a motivational (e.g., self-determination; e.g., Mageau & Vallerand, 2003) rather than a pedagogical paradigm. In particular, he invoked references to broader pedagogical literature (e.g., Rink, 2010) that encouraged an explicit focus on teaching/technical functions when examining aspects of effective teaching. Our limitation as first-timers to IPA was that we largely kept the level of analysis to content, instead of micro-analyzing text in terms the language used.

We achieved the following consensus: at the individual-level analysis, we left this quote under “giving individualized coaching,” but, with the group-level analysis, this particular quote was placed as part of the higher-order theme entitled “Instruction,” sub-theme “Coaching strategies,” with an operational definition of “the implementation of techniques and strategies coaches use to facilitate athletes’ learning in the course of the instructional environment.”

In presenting our experience using IPA methodology at a conference (Rathwell et al., 2014), several researchers asked why we did not parcel the data to write various articles under each of our own interpretations using different literature sources. We problematize and rhetorically questioned the etiquette involved in attempting to reach consensus on interpretations when using IPA? To us, it was important to consider the double hermeneutic process of researchers making meaning of the participant making meaning of their experiences. For this reason, we chose to challenge our own individual biases, take note of how they guided our interpretation, and strove for consensus on interpretations.

We appreciated the rigor of our team process in which aspects of coding and interpretation needed to be defended at formative stages. In essence, other team members were a check-and-balance to ensure a degree of confidence in our preliminary interpretations. We all felt that if we could not respectfully convince our team members of the data analysis at formative stages (including the anticipated discussion of such data and how emerging themes might be framed within extant literature), or if we could be swayed to accept a different but more suitable interpretation, then our initial analyses were likely not strong enough to present to readers in a manuscript. Moreover, in an empirical world that is wary of data disaggregation (i.e., when researchers take a large/main dataset and fragment it into individual parts, often called duplicates or parcels, which are then published separately; e.g., Huston & Moher, 1996), we became convinced that this formative search for consensual interpretation among team members, although tedious at times, resulted in an overall more-ethical and informed decision by the team.

Our experience, wherein all members were involved formatively in most steps of the IPA process, also encouraged us to contemplate advantages and challenges of using IPA in a group setting, rather than as a methodology for one researcher. We reflected on the degree to which each researcher was involved at each step. It is not clear whether a research team would yield similar products if one principal investigator conducted all lower level analyses, while co-investigators “waited in the wings” to conduct higher-order analyses. Our contemplation derives from a lack of discussion in manuscripts regarding the difficulties of team analysis in IPA. For this reason, we have attempted to be as transparent in our process as possible. Future researchers may consider these procedural challenges and ask themselves how to deal with team analysis.

Final analysis of our data rests in the write-up of manuscripts. Smith and Osborn (2003) noted: “The division between analysis and writing up is, to a certain extent, a false one, in that the analysis will be expanded during the writing phase” (p. 76). Smith (2011) notes the importance of being transparent, providing an interesting and well-evidenced analysis (from several participants) of four or five themes, and showing prevalence of themes with the density of the theme clearly demarcated. For participant samples over eight, there should be extracts from at least three participants for each theme to illustrate variation and detail of prevalence, or evidence of the density of the themes (Smith, 2011). Finally, there may be formal theoretical connections made between the text and outside sources, but this is usually created after the emergent analysis (Smith, 2004), perhaps through a discussion in a manuscript. These guidelines were used in writing manuscripts. However, since these manuscripts delve into the particular findings of the research, we deemed a discussion of this topic beyond the scope of this article. It should be noted that we allowed two research team members to each take the lead on writing one of the two results-oriented manuscripts, thus giving precedence to his or

her interpretation and micro-analysis of the data. The lead researcher on each manuscript developed the purpose of the article, and we moved from our charts of themes to an interpretive account of the participants' experiences by together discussing which themes were particularly important in developing this purpose, and then giving creative license to the lead author to interpret these themes. However, the other two team members, like in the process of initial data analysis, weighed in on and questioned the interpretations, which we feel strengthened the papers. These manuscripts are currently under review, which may present challenges in the form of peer-reviewers with their own lens of interpretation on the articles.

### **Conclusions for researchers interested in using IPA**

Based on the thorough description of our analysis, it is apparent that IPA is rigorous and produces a plethora of rich data. With almost 200 pages of analysis including almost 900 quotes, within a total of five higher-order themes, we certainly were swimming in data.

This was our team's first foray into IPA and we plan to continue using this methodology because of its ability to yield rich results. However, we do not consider ourselves experts on this topic as there is still much to learn about conducting IPA research. We also do not mean for this manuscript to be a "how to" manual for conducting IPA. Nonetheless, we consider our insights to be valuable learning material for others who would like to engage in such research. We must note that the process was time-consuming and laborious not only for one researcher, but for a team of researchers as well. As described above, all members were heavily involved in data analysis. From the perspective of training graduate students in the art of qualitative research methods, it is a great learning tool, but one that requires time and energy on the part of both the supervisor and student. We therefore caution graduate students, but also encourage them to pursue scholarly understanding of this methodology because of the richness of the data and thoroughness of the approach. Perhaps, due to time constraints, we advise students to consider using a smaller sample size. For example, three participants is an acceptable number and will likely still produce ample data for a thesis (Smith & Osborn, 2003).

Despite our cautions, we recommend IPA when investigating the lived experiences of a specific population. From the perspective of a new professor and supervisor, the practice has allowed one team member to hone her skills in teaching qualitative approaches and in facilitating learning for students in a measured and controlled, yet demanding manner. Learning the process and rigor of IPA has also allowed our doctoral student researcher to understand a new methodology. Moreover, because of the rigor involved, he gained a deeper understanding of qualitative approaches altogether. The use of multiple researchers throughout the data collection and analysis provided the doctoral student researcher with an equal voice in the research. He remarked that the process of finding consensus in our analyses protected his voice, which was not drowned out by senior researchers. Finally, another team member, who has generally used quantitative research approaches, appreciated how IPA encourages presentation of quote prevalence and frequency to supplement researchers' interpretations of the valence of participants' experiences. In sum, the results produced when following IPA are incredibly rich and allow for an in-depth understanding of the particular phenomenon being investigated. For these reasons, we encourage future sport coaching researchers to consider IPA as a valuable qualitative option.

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