Influence of Performance Enhancement and Administrative Tasks on Coaches’ Stress and Intentions to Continue

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This is the final version of a manuscript accepted for publication in the International Sport Coaching Journal. Copyright for this manuscript is held by Human Kinetics. The final online version will be available from: http://journals.humankinetics.com/ISCJ.
The purposes of this study were to, (a) assess motivational experiences of performance enhancement tasks (PET) and administrative tasks (AT), and; (b) examine the relationships of emergent motivational experiences of each task type to coaches’ perceived stress and intentions to continue coaching. In total, 572 coaches completed an online survey, which assessed autonomy, competence, relatedness, and other characteristics of PET and AT, intentions to continue coaching, and perceived stress. Two separate exploratory factor analyses (EFA) were conducted, one for AT and one for PET. This was followed up with CFA and SEM to examine relationships between emerging factors and stress and intentions. The factors generated for PET reflected ideas of autonomy, time conflict, and satisfaction, and for AT also included competence, effort, and job requirements. The resulting experiences of AT and PET appear to have different influences on stress and intentions, suggesting their distinction will be important in future work examining coach retention.

Key Words: Coaches, Self-determination Theory, Basic Needs, Motivation, Stress, Quitting
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In the context of competitive sport, extensive research has examined the actions and behaviors of athletes, and the consequences associated with behavioral engagement in terms of motivational consequences (e.g., Lonsdale & Hodge, 2011; Lonsdale, Hodge, & Rose, 2009). Factors that influence athletes’ motivation, such as coach and parent behaviors, have also been widely examined (e.g., Banak, Sabiston, & Bloom, 2011; Keegan, Harwood, Spray & Lavallee, 2009). In contrast, far less attention has been given to understanding influences on coach motivation, leading to a number of coaching scholars calling for increased research in this area (Vallerand, 2008; McLean, Mallett, & Newcombe, 2012).

Understanding how daily behaviors influence coaches’ motivation, and subsequently their well-being and satisfaction may help to explain why coaches leave the coaching profession (Jowett, 2008; McLean et al., 2013). Additionally, coaches’ motivation can also alter their interactions and relationships with athletes (McLean et al., 2013). Coaches’ behaviors have consistently been shown to affect athletes’ motivation, overall sport experiences, and their physical and psychological development (e.g., Bartholomew, Ntoumanis, & Thogersen-Ntoumanis, 2009; Boyce, Gano-Overway, & Campbell, 2009; Gillet, Vallerand, Amoura, & Baldes, 2010). Understanding factors that influence coaches’ stress and intentions to continue coaching will help to provide information that can be used to enhance coach education, clarify coaches’ job expectations, increase coach retention, and increase the extent to which coaches display positive coaching behaviors (Amorose, 2007; Stebbings, Taylor, Spray, & Ntoumanis, 2012).
Research to date has tended to address ‘coaching’ as a singular vocation, and has not addressed the specific and complex tasks that have been identified as comprising coaching (McLean & Mallett, 2011; Washington & Reade, 2013). When considering the role of the coach, it is apparent that coaches are required to complete a range of tasks within their job (Potrac, Brewer, Jones, Armour, & Hoff, 2000). It has been identified that coaches’ jobs are not limited to performance enhancement tasks (PET) – (i.e., tasks that are specifically related to enhancing their athletes’ sporting performance such as planning physical training, coaching technical skills in practice, or coaching in competition). Rather, coaches are also often required to complete administrative tasks (AT), such as planning travel, handling budgets and accounting, or ordering equipment (Washington & Reade, 2013). One reason to explore different types of coaching tasks is to better understand motivational consequences of the tasks. The coaching literature is consistent in describing the difficult work context, extensive work hours, and poor work life balance that leads to stress and burnout (e.g., Fletcher & Scott, 2010; Goodger, Gorely, Lavallee, & Harwood, 2009; Knight, Reade, Selzler, & Rodgers, 2013). Given the range of tasks involved in coaching, it is possible that examining the motivational experiences of performing different tasks might shed light on how different aspects of coaching contribute to coaches’ psychological well-being and intentions to continue coaching, and that a more nuanced approach to studying coaching as a career is necessary.

One theoretical approach that might be useful in this exploration is self-determination theory (SDT; Deci & Ryan, 1991; Ryan & Deci, 2002). SDT proposes a model of the self in which people are active organisms with innate tendencies toward growth in social contexts as a foundation for creating a coherent sense of well-being. The self is seen as an active agent in an ongoing process of integration of the cultural and environmental inputs. As such, the degree of
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self-determination in performance of various behaviors can influence personal growth and the quality of overall experiences.

The value of distinguishing occupational tasks to understand motivation and job intentions is apparent in research conducted in other domains. For example, research examining the motivation of teachers has highlighted a difference between the motivational underpinnings for completing tasks that can be described as administrative rather than actual teaching tasks (Fernet, Senécal, Guay, Marsh, & Dowson, 2008). Fernet and colleagues (2008) identified different motivational processes underpinning class preparation, teaching, evaluation of students, classroom management, administrative tasks (including meetings with parents and other staff) and complementary tasks (such as extracurricular activities, committees). Specifically, it emerged that these different tasks had varying degrees of self-determined motivational underpinnings and there were different levels of self-determined motivation between teachers working in different settings.

Further, although PET and AT have not been specifically examined relative to coach motivation, some research has pointed to the potential influence these task types might have on coach retention and satisfaction. McLean and Mallett (2011) identified reasons why coaches coached. They identified factors including being connected to the sport, aiding the development of athletes, external influences such as a desire to win, and internal influences such as the intrinsic love of the sport. Taken together, these reasons appear to indicate that coaches coach to engage in and perform PET. In contrast, AT may be less satisfying because, arguably, performing AT were not the primary reasons coaches took up their careers. As Washington and Reade (2013) suggested, the increased expectations of coaches to be managers, in addition to their main contributions in improving athlete performance, may increase perceptions of stress.
due to the total volume of activities coaches must engage in, and the degree to which they feel prepared to carry out different activities. Previous research has revealed concerns about work-life balance during coaching (Knight, Rodgers, Reade, Mrak & Hall, in press). The total volume of tasks also creates a potential for time conflict. Time conflict might be a particularly negative experience when the conflict is between appealing (PET) and unappealing (AT) tasks. It is also possible that the motivational foundation for AT or managerial-type tasks is less self-determined and performance of AT will not satisfy the basic psychological needs (cf. Ryan & Deci, 2000; Gagne & Deci, 2005).

The purpose of this study was to explore the possibility that PET and AT might have different motivational consequences. Two aims were specifically, (a) to assess motivational experiences of performance enhancement tasks (PET) and administrative tasks (AT), and; (b) to examine the relationships of emergent motivational experiences of each task type to coaches’ perceived stress and intentions to continue coaching. Both of these outcomes are broad, however, if it can be demonstrated that PET and AT differentially relate to them, a potentially important topic of future research will be revealed. Based on previous literature, from the lens of SDT, we hypothesized that PET were likely to reflect more self-determined motivation than AT, and to associate with stronger intentions to continue and lower perceived stress. On the other hand, it was hypothesized that AT might be less representative of self-determined motivational experiences and less associated with intentions to continue, and positively associated with perceived stress. Additionally, it was hypothesized that perceived conflict between these two tasks, possibly because of lower quality motivation for one, would be associated with higher perceptions of stress and lower intentions to stay in coaching.

**Method**
Participants

The study was conducted with high-performance coaches working with a population comprising university, college, Canada Games, and nationally funded athletes. A total of 572 coaches provided sufficient data for the analyses reported here, with 520 providing complete data for the factor analyses. Due to the sample size, we chose not to impute or replace missing data. The differential n for the two types of analysis revealed the need for responses to every single item for factor analysis. For aggregate variables, some missing data are tolerated through the aggregation process (the mean can be computed on the scores available even if one is missing), preserving more individuals in the analysis. Nearly 45% of the participants were Canadian Interuniversity Sport (CIS) coaches, 23% were Canadian Collegiate Athletic Association (CCAA) coaches, 56% were club coaches, 29% were national team coaches, 48% were provincial team coaches, and 5.7% were self-employed coaches. Less than half (47.2%) of the respondents had only one coaching position (31% had two, and 22% had more than two). The coaches represented 56 sports with 37.8% in individual sports and 62.2% in team sports. Basketball, volleyball, soccer, and ice hockey were the most common team sports (about 42% of the overall responses), with other team sports such as lacrosse, ringette, rugby, and curling also included within a list of 17 team sports. A total of 39 individual sports were represented with the most common being swimming, track and field, golf and figure skating (15% of the overall responses).

The age range of participants was 24 – 70 years, with an average of 44 years. Of the 572 participants, 25% were female and 75% were male. The majority of coaches (71.2%) reported being married or in a marriage-like relationship. Half of the coaches in this study had

1 These percentages total over 100% because some participants indicated coaching over a number of different settings.
competitive experience at the national (35%) or international (27%) level. Overall, 56.7% of the participants had completed Level 3 (of 5) in Canada’s National Coaching Certification Program. Seventy five percent of the respondents had an undergraduate degree or postgraduate degree (higher than the national average).

Procedure

Prior to data collection, an institutional research ethics board approved all procedures. Permission was then received from the Coaching Association of Canada to access the email addresses of the coaches in their coaching database. All coaches were sent an email inviting them to participate in the study. The initial email included a description of the study and a hyperlink to an informed consent document and questionnaire. Consenting coaches agreed to participate by clicking the appropriate button that opened the web-based questionnaire. The response rate was 43% of coaches in our target population.

Development of Items Assessing Performance and Administrative Tasks

As part of a larger exploratory study (including other assessments), questions were developed to consider aspects of motivation broadly reflecting components of SDT. Basic psychological needs theory was used to guide the development of items due to previous literature showing the importance of needs satisfaction on overall well-being and behavioral persistence. It was decided to develop a broad array of items to allow for the probability of complexity in the motivational experiences associated with each task set. That is, although, anecdotally, most coaches would suggest that AT are unappealing tasks, that might be only in contrast with PET and it is possible that some coaches enjoy performing some AT. It was also unknown whether PET and AT would be distinguishable at all in motivational terms. A team of researchers including professors, graduate students, and current or former high-performance athletes and
coaches developed the proposed items. These items were developed in consideration of previous
literature and athletes’ and coaches’ experiences in the coaching environment. Once the items
had been developed, the same group conducted a preliminary assessment of the items.

To ensure the items that were developed were relevant to coaches’ experiences, it was
deemed particularly important to include coaches in the process of developing them. This was a
collaborative process. One of the higher level purposes of the research was to study the status of
coaches in Canada. From a pure academic perspective, research and practitioner collaborations
can be challenging to negotiate. In this process the coaches involved in the consultation took
exception to being asked about competence for PET, and they felt the questions were likely to
result in losing respondent confidence in the credibility of the study. In short, they unanimously
regarded the questions as ‘stupid’. Therefore, to preserve the opportunity to investigate other
aspects of the tasks, those questions were dropped. Consequently, more aspects of AT are
addressed than PET.

A series of 21 items were developed to assess the motivational experiences associated
with AT, and a further 12 items were developed to assess the motivational experiences
associated with PET. The items, their means, and standard deviations are presented in Table 1.
The resulting items were subjected to exploratory factor analysis (EFA) to search for any
patterns that might represent a structure for understanding the motivational experiences of PET
and AT respectively. A successful EFA was to be followed up with a structural modeling
approach to CFA addressing both tasks simultaneously, and then examining relationships with
stress and intentions.

Intention to continue coaching was assessed with a single item: “How much longer do
you intend to coach?” Response format included 6 choices ranging from <2 years, 2-4 years, 4-6
years, 6-8 years, over 8 years and not sure. (Those responding ‘not sure’ were excluded from analyses considering this variable). A second question asked “How much longer to you plan to remain in this [current] position” with the same responses.

Perceived stress was assessed with the 10-item Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). Questions included, “In the last month, how often have you been upset because of something that happened unexpectedly?” and “In the last month, how often have you felt that you were unable to control the important things in your life?” Responses were on a 5-point Likert scale from 0 (Almost never) to 4 (Very often). Cohen et al. (1983) reported internal consistency >.8 for all scales, and theoretically expected relationships with depressive symptoms, physical symptoms, as well as increased likelihood of seeking health care among students who had completed the questionnaire, suggesting clinical influence. This instrument was deemed to be appropriate in view of the concerns about work-life balance among coaches (Knight et al., in press).

**Analysis and Results**

**Exploratory Analysis of Evidence for Motivational Structure**

To look for any pattern of motivational experiences with PET and AT, two separate exploratory factor analyses (EFA) were conducted, one for AT and one for PET. Several items were reverse scored to address wording contrary to the majority of items. These are marked with an asterisk in the tables. The data analysis proceeded in stages. First, the descriptive statistics associated with the items were examined for suitability for EFA. Second, principal components analysis (PCA) was conducted with direct oblimin transformation (delta=0) to reduce the items to a smaller number of interpretable factors. The number of factors was determined by joint consideration of the Kaiser-Guttman rule (eigenvalues >1.0) and Cattell’s (1978) scree plot.
Thurstone’s principle of simple structure using a pattern coefficient of $|0.3|$ as the lower bound of meaningfulness per factor and interpretability of the solution and parallel analysis were used to determine the final solution. Finally, internal consistency estimates (Cronbach’s alpha, 1951) were calculated for the items comprising factors retained in the EFA solution.

Table 1 shows the factor loadings and other descriptive statistics for PET. Three interpretable factors were extracted accounting for 64.52% of the variance with eigenvalues of 3.80, 2.62, and 1.33 respectively. These three factors were interpretable as: “personal satisfaction,” “time conflict,” and “autonomy.” For PET, Cronbach’s alphas were acceptable for personal satisfaction and for time conflict. The descriptive statistics for each of the factors reported in Table 1 reflect these final item groupings subsequent to the reliability analysis.

Table 2 shows the results for the AT. Six interpretable factors were extracted accounting for 65.45% of the variance, with eigenvalues of 5.20, 2.95, 1.92, 1.46, 1.20, and 1.00 respectively. These six factors can be interpreted as: “personal satisfaction,” “time conflicts,” “effort/pride,” “autonomy,” “competence,” and “job requirements.” For the AT factors, Cronbach’s alphas were also acceptable. Summary statistics are presented in Table 2.

### Confirmatory Factor Analysis of PET and AT Factors Together

Structural equation models (SEM) were conducted in Mplus 7 (Muthen & Muthen 2012), using the full information maximum likelihood (FIML) method to estimate model parameters. FIML estimation uses all available data for each variable to generate parameter estimates; it does not delete incomplete cases, resulting in parameter estimation based on all cases (Kline, 2011). Data was available for 556 cases from which the analyses were conducted.

First a CFA model (i.e., measurement model) was conducted to confirm the latent factor structure from the EFA analyses. The initial testing of the CFA model resulted in the deletion of
four items due to low factor loadings and face validity of the items in consideration of the latent
factor. For AT satisfaction, “Of all the things I do in my job, performing the administrative tasks
is what I do best” was removed. For AT effort, “I try to do the administrative tasks to the best of
my ability,” was removed. For AT and PET time conflict, “There is sufficient time in my weekly
schedule to focus on tasks that relate directly to the administration/performance-enhancement
training of my athletes/team,” were removed. The model fit indices for the final CFA model (N =
556) were as follows: $\chi^2 = 757.49$, $p = .000$; RMSEA = .05 (.04 - .05); CFI = .93, SRMR = .06.
Figure 1 shows the final CFA measurement model and standardized estimates. Correlations
among the emergent factors are provided in Table 3.

**Relationship of Emergent Structural Factors to Stress and Intentions**

Next, three structural models assessed the contribution of AT and PET motivational
characteristics on PSS, intentions to continue coaching, and intentions to continue in their current
position, respectively. Separate structural models were conducted because of low correlations
between PSS and intentions. PSS and intention variables were regressed on all latent factors:
PET autonomy, PET Satisfaction, PET time constraints, AT time constraints, AT effort, AT
autonomy, AT competence, AT satisfaction, AT job requirements. Table 4 displays the
standardized estimates for the structural models. Significant positive predictors of coaches’
perceived stress were AT time constraints and AT job requirements. AT competence was
significantly negatively associated with stress. This model accounted for 31% of the variance
perceived stress, $\chi^2 = 785.71$, $p = .000$; RMSEA = .05 (.04 - .05); CFI = .93, SRMR = .06.
Significant positive predictors of intentions to continue coaching were PET satisfaction, AT time
constraints, and AT autonomy. AT competence was significantly negatively associated with
intentions to continue coaching. This model accounted for 9% of the variance of intentions to
continue coaching, $\chi^2 = 790.79$, $p = .000$; RMSEA = .04 (.03 - .05); CFI = .93, SRMR = .06. One

significant positive predictor of intentions to continue in this position was identified: PET

satisfaction. This model accounted for 3% of the variance of intentions to continue in this

position. $\chi^2 = 822.33$, $p = .000$; RMSEA = .04 (.04 - .05); CFI = .92, SRMR = .06.

**Discussion**

The purposes of this paper were, (a) to assess motivational experiences of performance

elevation tasks (PET) and administrative tasks (AT), and; (b) to examine the relationships of

emergent motivational experiences of each task type to coaches’ perceived stress and intentions

to continue coaching. To accomplish these purposes, first, a set of items depicting possible

motivational characteristics for each set of tasks were developed preliminarily and assessed in

terms of motivational implications by EFA (separately) followed by CFA (simultaneously).

Second, the relationships between the resulting factors and the three dependent variables of

interest were assessed using SEM.

Three factors were generated for motivational experiences of PET reflecting the ideas of

autonomy, time conflict, and satisfaction, and six factors were generated for motivational

experiences of AT additionally including competence, effort, and job requirements. The CFA

supported the idea that AT and PET comprise different aspects of coaching, and that

characteristics of each task set differentially relate to stress and to a lesser extent to intentions to

continue coaching.

The findings of this study are consistent with SDT. However, the resulting factors

describing PET and AT, although informed by psychological needs theory, did not reproduce

factors representing the psychological needs exactly. Of course, in the case of PET, a priori

constraints prevented the emergence of competence. However, autonomy did emerge for both
PET and AT. The other factors seem more related to consequences of the tasks (e.g., satisfaction) and might reflect behavioral regulations. Behavioral regulations were not assessed in this study. But, the results suggest that although PET and AT are clearly separable, the reasons for their performance probably have to be considered separately from the consequences of their performance. Recently, Prentice, Halusic, and Sheldon (2014) have proposed that needs can serve both as requirements and as motives. In particular, the current results support the idea that people do not feel good or thrive when the basic experiences are not met, possibly resulting stress and intentions to seek other experiences.

Generally, acceptable factor structures underpinning the motivational characteristics of AT and PET were discovered that link well to self-determination theory. This allows for the comparison of the quality of the motivation for performing each type of coaching task, and it can be seen that satisfaction and autonomy are higher for PET and time conflict is lower than for AT. For AT, effort and competence scores are high, suggesting that coaches feel prepared to engage in AT, so AT are not posing an unreasonable challenge to them, but the satisfaction associated with AT is much lower than for PET. Furthermore, AT competence is negatively related with perceived stress and intentions to continue, providing some novel evidence of complex motivational influences and effects of these tasks. SDT proposes that contexts that facilitate satisfaction of basic needs will increase satisfaction and produce more effort on a task (Deci & Ryan, 2008). Personal satisfaction is one of the key outcomes of more self-determined motivation and is believed to lead to enhanced self-determination and task persistence (Vansteenkiste, Simons, Lens, Deci, & Sheldon, 2004). Performing AT seems to pose time conflicts with performing PET, for which the coaches do experience higher autonomy and satisfaction. The relatively lower scores on time conflict for PET than AT suggest that the
‘conflict’ is attributed to the AT, not the PET, when obviously it is doing both that actually poses the conflict. This finding is supported by the positive association of AT time conflict with stress and the lack of relationship between stress and PET time conflict. Such findings suggest that coaches might view AT tasks as outside the coaching role, whereas PET tasks are essential. Future research examining coaches’ perceptions of their roles and work-environment might help shed further light on this distinction.

AT competence was negatively associated with stress, suggesting that those who feel more competent at AT experience less associated stress. Zero order correlations showed that AT competence was positively associated with PET satisfaction, AT satisfaction, and AT effort, and negatively associated with PET time conflict. This is the first evidence that it is probably not strictly competence that is the limiting factor for performing AT, autonomy is also important, and there are complex relationships between the two tasks. One could speculate that providing coaches with higher experiences of autonomy regarding the completion of AT tasks might be more appealing. Redesigning coaching job descriptions to clearly articulate AT demands, or constructing coaching teams dividing out the AT demands might also be beneficial.

SDT hypothesizes that when there is higher autonomy there should be higher task satisfaction (Vansteenkiste, Niemec, & Soenens, 2010). We found higher autonomy for AT (the less appealing task) was associated with intentions. There was no relationship for PET autonomy, possibly due to low variation. PET autonomy and AT autonomy had significant negative correlations with time conflict, and with stress in the structural equation model. Furthermore, PET and AT time conflict are significantly associated with each other ($r=0.76$), as would be expected. However only AT time conflict was associated with higher stress, not PET, suggesting a definite hierarchy in task preference. From a practical standpoint, it appears that the
job descriptions and expectations of professional coaches could be better structured to ensure that sufficient time is allocated to AT to reduce time-conflict with PET. This is consistent with the suggestions of Gilbert and Trudel (2004) who hypothesized that it is the lack of job structure in coaching that leads to time-conflict.

Anecdotally, it is acknowledged that most high-performance coaches would engage solely in PET if they could. However, AT effort had a strong positive correlation with AT satisfaction and a small correlation with PET satisfaction. These results suggest that those coaches who put more effort into AT experience more satisfaction from AT as well as from PET tasks, with no empirical effect on time conflict, suggesting that time on task and effort on task might be different. Therefore, the implementation of structured job expectations linked to reward (i.e., contracted expectations and association with salary) might be a way to reduce stress associated with non-preferred tasks (Siegrist, 1996) by helping coaches to understand the breadth of the work expectations and appropriate time allocation of a competitive coach (Mallett & Côté, 2006; Cunningham & Dixon, 2003). If coaches regarded AT, in addition to PET, as an essential part of the job and had appropriate behavioral expectations, they might perceive less time-conflict between the two sets of tasks even though they retain higher preference for PET.

PET autonomy and AT autonomy were positively correlated with each other, negatively associated with stress, and negatively correlated with time conflict in both domains (PET and AT). AT autonomy was uniquely associated with AT satisfaction (but not PET satisfaction), and PET autonomy was similarly associated with PET satisfaction (but not AT satisfaction). This is clear evidence that AT and PET are distinct task categories. The association between autonomy and satisfaction in both task domains is consistent with SDT (Deci & Ryan, 2008; Wilson & Rodgers, 2002).
The purpose of the CFA was to examine the nature of the motivational experiences underpinning PET compared to AT tasks. Again, on the advice of our expert panel of coaches who reviewed earlier iterations of the intended instrument, no items relating to competence for performing PET were included in this study of high performance coaches because the experts felt this would impair the credibility of the entire study. This is an important limitation of our study. Coaches consulted in item development experienced being asked if they were competent at coaching skills to be unflattering and surprising, and advised that such questions could result in coaches refusing to respond because of lost credulity for the relevance of the whole study. Future studies of a broader population of coaches including inexperienced or novice coaches would likely benefit from assessment of competence for performing PET.

In terms of intentions to continue in the current coaching position, the only association was with PET satisfaction. However, in addition to PET satisfaction, AT autonomy was related (but weakly) to intentions to continue coaching in general. There appears to be a critical influence of PET satisfaction, which is not surprising given that the focus of high performance coaches is usually upon performance enhancement. However, autonomy over AT also appears to be related to intentions to continue coaching as a career. Some realization that AT are required in career high-performance coaches, along with enough structure to reduce time-conflict between AT and PET might result in higher coach satisfaction, lower stress, and better retention. An unexpected finding was the positive association of AT time conflict with intentions to continue coaching. This might arise because coaches experiencing extensive time conflict are likely to be coaches with more complex jobs who perceive AT as critical to advancing in coaching as a career. Although a low amount of variance in either type of intentions was accounted for, given the homogeneity of the sample and the exploratory nature of the study, encouraging evidence of
the importance of distinguishing the influence of different tasks on coaches’ experiences has clearly emerged.

Coaching research has recognized the importance of performing AT in the role of the competitive coach (e.g., Inglis, Danylchuk, & Pastore, 1996; MacLean & Chelladurai, 1995; Dixon & Warner, 2009) but until now there has been very little discussion of the motivational experiences of performing AT. Although our evidence concerning the coaches’ competence for PET was inferred, the evidence that coaches are satisfied with their PET and feel in control of them was strong. However, when asked about AT, their autonomy and satisfaction levels were only slightly lower. The current study provides novel evidence that coaches do feel competent for performing AT and do derive some satisfaction from them, especially if they are expending some effort on them.

There are some important limitations to consider in the interpretation of the data presented here. First, despite a large and heterogeneous sample of high performance coaches, the design is limited to cross-sectional consideration and so the direction of the relationships emerging cannot be determined. Also, despite the large sample, it was not large enough to permit sample splitting for the EFA and CFA. There is a need for future measurement work to further elucidate motivational structures associated with PET and AT. Future research should address both developing and high performance coaches and therefore credibly include assessments of competence for PET. Less accomplished coaches might display different scores on the factors identified here, and different relationships between the factors and intentions to continue in the profession. Finally, more precise and proximal outcome variables could be assessed to determine the short and long term effects of PET and AT experiences on coaches’ career decisions.

Conclusion
The current results show that AT can be a source of job satisfaction for coaches when they are associated with effort. However, time conflict between PET and AT is a source of stress. Low autonomy for AT is associated with lower intentions to continue coaching. It is possible that the time-conflict between PET and AT could be resolved through either clearer job expectations and appropriately structured job descriptions, or alternatively through provision of support for the least preferred tasks: AT (Allen & Shaw, 2009; Inglis, Danylchuk, & Pastore, 1996; MacLean & Chelladurai, 1995). The results clearly show that perceived autonomy for both PET and AT are important correlates of lower perceived stress and of more positive intentions to continue coaching in general and in a coaches’ current position. The results reveal a complex picture of motivational characteristics of PET and AT, with evidence of satisfaction for performing both. Theoretical interpretation supports the general tenets of SDT, and future research could take a primarily theoretical approach to complement this more practical approach.
References


Table 1

*Performance Enhancement Tasks*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1 Pattern coefficient</th>
<th>Factor 2 Pattern coefficient</th>
<th>Factor 3 Pattern coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1. I experience a sense of personal satisfaction</td>
<td>.889</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2. I take a high degree of pride in how well I perform</td>
<td>.818</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3. I find the tasks relating to …PE… to be personally enjoyable/rewarding</td>
<td>.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4. If my job description would allow it, I would invest the majority of my time and energy into the tasks</td>
<td>.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S5. I really like doing the tasks that relate directly to …</td>
<td>.784</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC1. Given my current job requirements, I rarely feel I have sufficient time to adequately focus on the tasks …</td>
<td></td>
<td>.840</td>
<td></td>
</tr>
<tr>
<td>TC2. I feel that my performance on the tasks relating directly to the …PE… suffers because of time conflicts with other aspects of my job</td>
<td></td>
<td>.838</td>
<td></td>
</tr>
<tr>
<td>TC3. I find that the …PE tasks… conflict with my other job responsibilities (e.g., administration…)</td>
<td></td>
<td>.790</td>
<td></td>
</tr>
<tr>
<td>TC4. There is sufficient time in my weekly schedule to focus on tasks that relate directly to … PE.</td>
<td></td>
<td></td>
<td>.619</td>
</tr>
<tr>
<td>A1. I can choose to spend as much or as little time as I want on the tasks associated with …PE</td>
<td></td>
<td></td>
<td>.843</td>
</tr>
<tr>
<td>A2. I feel that how I perform the tasks …PE… is completely up to me</td>
<td></td>
<td></td>
<td>.819</td>
</tr>
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<td>A3. I have a high degree of choice regarding the …PE… I conduct …</td>
<td></td>
<td></td>
<td>.547</td>
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<td>Standard deviation</td>
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Interfactor correlations

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<td>.040</td>
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<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td>.263**</td>
<td>-.202</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note. *p < .05; **p < .01; † indicates item removed from Final CFA.
### Administration Tasks

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1. I find performing AT to be personally enjoyable/rewarding</td>
<td>.758</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2. I experience a sense of personal satisfaction from doing the AT</td>
<td>.711</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3. I really like doing the AT</td>
<td>.778</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4. Of all the things I do in my job, performing the AT is what I do best</td>
<td>.655</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC1. I feel that my performance on AT suffers because of time conflicts with other parts of my job</td>
<td>.852</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC2. Given my current job requirements, I rarely feel I have sufficient time to adequately focus on AT</td>
<td>.821</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC3. I find that performing AT conflicts with my other job responsibilities (e.g., PE)</td>
<td>.726</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>TC4. There is sufficient time in my weekly schedule (in season/out of season) to focus on AT</td>
<td>.684</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1. I put maximal amounts of personal effort into AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.717</td>
<td></td>
</tr>
<tr>
<td>E2. I take a high degree of pride in how well I perform AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.662</td>
<td></td>
</tr>
<tr>
<td>E3. I put the minimum effort required into performing AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.713</td>
<td></td>
</tr>
<tr>
<td>E4. I try to do the AT to the best of my ability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.757</td>
<td></td>
</tr>
<tr>
<td>A1. I feel that how I perform the AT is completely up to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.859</td>
</tr>
<tr>
<td>A2. I can choose to spend as much or as little time as I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.844</td>
</tr>
</tbody>
</table>
want to on the AT

A3. I have a high degree of choice regarding performance of the AT

C1. I am extremely confident in my abilities to conduct the AT

C2. I feel that I do not have the necessary skills to perform the AT

C3. My previous training/education has prepared me well to perform AT

JR1. Performing my AT is extremely important to achieving my coaching goals

JR2. Conducting AT is a primary expectation of my job

JR3. Conducting AT is extremely relevant to what a coach at my level should be doing

<table>
<thead>
<tr>
<th>Factor 1: AT Satisfaction</th>
<th>Factor 2: AT Time conflict</th>
<th>Factor 3: AT effort</th>
<th>Factor 4: AT autonomy</th>
<th>Factor 5: AT competence</th>
<th>Factor 6: AT Job requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 items</td>
<td>4 items</td>
<td>4 items</td>
<td>4 items</td>
<td>3 items</td>
<td>3 items</td>
</tr>
<tr>
<td>Chronbach’s alpha</td>
<td>.83</td>
<td>.77</td>
<td>.80</td>
<td>.70</td>
<td>.68</td>
</tr>
<tr>
<td>Mean</td>
<td>3.22</td>
<td>4.33</td>
<td>4.99</td>
<td>4.03</td>
<td>5.23</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.23</td>
<td>1.32</td>
<td>1.22</td>
<td>1.30</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Interfactor correlations

Factor 1 (satisfaction) 1

Factor 2 (time) -.124 1

Factor 3 (effort) -.250 -.056 1

Factor 4 (autonomy) .192 -.202 .043 1

Factor 5 (competence) .160 -.043 -.286 .009 1

Factor 6 (job requirements) .318 .032 -.228 .031 .122 1
Note. + indicates item removed from Final CFA.
### MOTIVATIONAL CHARACTERISTICS OF COACHING TASKS

Table 3. Correlations among Administrative and Performance Enhancing Task Factor Indicators

<table>
<thead>
<tr>
<th>PET satisfaction</th>
<th>PET time conflict</th>
<th>PET autonomy</th>
<th>AT satisfaction</th>
<th>AT time conflict</th>
<th>AT effort</th>
<th>AT autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET satisfaction</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET time conflict</td>
<td>.09</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET autonomy</td>
<td>.44**</td>
<td>-.17**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT satisfaction</td>
<td>.00</td>
<td>-.14**</td>
<td>.07</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT time conflict</td>
<td>.14*</td>
<td>.76**</td>
<td>-.15*</td>
<td>-.12*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AT effort</td>
<td>.13*</td>
<td>-.07</td>
<td>.02</td>
<td>.72**</td>
<td>.012</td>
<td>1</td>
</tr>
<tr>
<td>AT autonomy</td>
<td>.04</td>
<td>-.22**</td>
<td>.49**</td>
<td>.26**</td>
<td>-.21**</td>
<td>.02</td>
</tr>
<tr>
<td>AT competence</td>
<td>.14**</td>
<td>-.15**</td>
<td>.12*</td>
<td>.45**</td>
<td>.00</td>
<td>.54**</td>
</tr>
<tr>
<td>AT job requirement</td>
<td>.06</td>
<td>-.05</td>
<td>.05</td>
<td>.59**</td>
<td>.09</td>
<td>.54**</td>
</tr>
</tbody>
</table>
MOTIVATIONAL CHARACTERISTICS OF COACHING TASKS

Note. * p < .05; ** p < .01; PET = performance enhancing tasks; AT = administrative tasks.

Table 4
Standardized Estimates for Structural Models of the Predictors of Perceived Stress and Intentions to Continue Coaching

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Perceived Stress</th>
<th>Intentions Continue Coaching</th>
<th>Intentions Continue This Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET autonomy</td>
<td>-.13 (.08)</td>
<td>-.06 (.09)</td>
<td>-.09 (.08)</td>
</tr>
<tr>
<td>PET satisfaction</td>
<td>.03 (.05)</td>
<td>.20*(.06)</td>
<td>.18**(.06)</td>
</tr>
<tr>
<td>PET time constraints</td>
<td>.14 (.10)</td>
<td>-.17 (.12)</td>
<td>-.08 (.11)</td>
</tr>
<tr>
<td>AT time constraints</td>
<td>.25* (.11)</td>
<td>.23* (.11)</td>
<td>.09 (.13)</td>
</tr>
<tr>
<td>AT effort</td>
<td>.13 (.09)</td>
<td>.17 (.10)</td>
<td>.01 (.10)</td>
</tr>
<tr>
<td>AT autonomy</td>
<td>-.05 (.07)</td>
<td>.18* (.08)</td>
<td>.03 (.08)</td>
</tr>
<tr>
<td>AT competence</td>
<td>-.30**(.06)</td>
<td>-.17* (.07)</td>
<td>-.07 (.07)</td>
</tr>
<tr>
<td>AT satisfaction</td>
<td>-.09 (.09)</td>
<td>-.05 (.11)</td>
<td>.02 (.12)</td>
</tr>
<tr>
<td>AT job requirement</td>
<td>.19**(.07)</td>
<td>-.07 (.08)</td>
<td>.01 (.09)</td>
</tr>
</tbody>
</table>

Note. Standard errors are in parentheses. PET = performance enhancement tasks, AT = administrative tasks.
*p < .05, **p < .01.