



Research Article

IJSEHR 2019; 3(2): 28-32
© 2019, All rights reserved
www.sportsciencesresearch.com
Received: 25-07-2019
Accepted: 14-10-2019

Predictors of well-being and burnout: the case of female professional footballers in the Netherlands

Dr. Oliver Mason¹

¹ School of Psychology, University of Guildford, UK

Abstract

Background: Little is known about well-being and burnout in female professional soccer. **Aims and Objectives:** This study aimed to delineate and predict these outcomes in female players in the Netherlands. **Study design/setting:** A cross-sectional study using validated self-report instruments assessed the basic emotional needs, work-life balance, coaching support and wellbeing/burnout in female professional football players. **Materials and Methods:** 67 players from across all nine Dutch Eredivisie league clubs completed a range of self-report measures. These assessed perceived coach autonomy support, work-life conflict, basic needs (for autonomy, competence and relatedness), subjective vitality and burnout on scales specific to elite athletes. **Statistics/Results:** These suggested that the environment in terms of coaching is broadly supportive for most individuals and is not leading to burnout and poor wellbeing across the sample. A minority of players were nevertheless identified to have significantly poor wellbeing and high levels of burnout. **Conclusion:** Consistent with basic need theory, poor wellbeing was predicted by several unmet needs, while burnout was predicted by both work-life conflict and unmet needs. There are clear implications that female professionals frequently experience high levels of work-life conflict.

Keywords: football, women, burnout, coaching, wellbeing.

INTRODUCTION

UEFA's women's football development programme (WFDP) has supported the game for nearly a decade on behalf of the UEFA member national associations. The programme provides guidance, expertise, advice and resources so as to give UEFA and its national FAs each of which has different circumstances and needs. Supporting the professional development of the female game is one key objective of WFDP, and the well-being of players in an increasingly professionalised game has been identified as one element of this. At the same time there is potentially awareness of a decline in the wellbeing of players—several high profile untimely deaths of female professionals in both the UK and Germany in the past five years have perhaps served to highlight the stresses in the lives of those in the game. Kelly Smith, the all-time leading scorer in English women's football history, revealed upon retirement in 2017 that she considered ending her own life when injury threatened her playing career. The current study took place in the Netherlands where women's football is gaining huge momentum, and has had a professional league since 2007. Participation and fan support is widely increasing, particularly following success in the European Championship in 2017. The current Eredivisie professional league has nine clubs participating.

Player well-being in women's professional football

How best to nurture and support professionals in sport, and women in football in particular? To support these objectives, there is a clear need for a strong evidence base for practitioners to draw upon, and such evidence needs to be directly relevant to the gender and sport involved. There is a widely held notion that the type of sport played may influence the developmental trajectory of an athlete ^[1], suggesting that findings from one sport are unlikely to be directly applicable to another. Practitioners require a contextually and culturally specific ^[2] evidence-base to inform their practice in order to best meet the needs of their clients, with particular attention needed within marginalised research populations ^[3, 4]. This is of note in women's soccer as the general trend in sport psychology research is that females are disproportionately under-represented against their male counterparts. This is definitely the case with respect to understanding determinants of well-being and related psychosocial factors in female football players: the majority of evidence that can be brought to bear is either from another sport, and/or in male players. Whilst there has been growth in research in aspects of women's football such as physical

*Corresponding author:
Dr. Oliver Mason
School of Psychology,
University of Guildford, UK
Email: o.mason[at]surrey.ac.uk

demands and characteristics (e.g. [5, 6]), the consideration afforded to psychosocial factors associated with talent and career development in talented and elite women's football remains behind other aspects of sport science: furthering the female soccer-specific evidence-base is a central consideration for the continued growth and development of female soccer.

Dual career demands during the investment years [7] appear to be a threat to holistic player development, can impact on junior-to senior career transitions, and impact negatively on player wellbeing [8]. A rare study of seven professional female players in Sweden [9] highlighted that the dual career concept 'needs further reflection and adjustment' because of its demands. Overall, it is important to understand the experiences of talented and elite female players as they tackle various career transitions so as to better inform professional practice in this area. Ultimately, this will support national and international bodies in football in their objective of increasing the chances that talented female soccer players will be able to experience a more fulsome and productive career in the sport. A wide range of psychological and social factors, at the individual, situational, and environmental level positively and negatively influence well-being in elite female players.

Well-being is a potentially very broad psychological construct with a wealth of definitions. In the context of sport, players might be considered fully functioning when reporting a heightened sense of positive energy, and likewise lacking well-being when reporting a perceived loss of energy, or feeling emotionally and physically exhausted. A common measure used in athletes is that of subjective vitality [10]. The converse of well-being - 'burnout' - is a maladaptive psychological outcome that can result from the pressures of elite sport. Consequently, preventing, or at least minimizing, the occurrence of burnout has been viewed as an important issue in the sport psychology literature. The current consensus undoubtedly is in support of Raedeke's [11] definition of *athlete burnout* as a syndrome characterized by: (i) emotional and physical exhaustion; (ii) sport devaluation; and (iii) a reduced sense of accomplishment. This symptom-based definition provides a means by which the potential causes and consequences of burnout, such as illness, injury, dropout, has frequently been examined using the Athlete Burnout Questionnaire [12].

A related area is that of work-life balance (or its converse, *work-life conflict*). Several authors have advanced notions that a conflict between a professional role and one's personal life are important determinants of health and well-being, and that a balance, whereby these can be coordinated or mutually supportive of one another, is healthier. The consequences of a lack of balance have been extensively studied both for the individual personally, and for the work context. These can include lower family satisfaction, relationship stress, negative affect and drug/alcohol use. In the workplace, job dissatisfaction, work stress, absenteeism and 'presenteeism' may result and organizational commitment may suffer. In a team context these may translate as poorer performance, team cohesion and so forth. The gender perspective is particularly relevant to work-life balance [13]. If women are to 'have it all' - a high commitment career, and family or partnered lifestyle, how is this best achieved? The global picture is that persistent gendered cultural norms and assumptions underpin the work-family articulation [14]; women remain under-represented in many areas of the economy and society in most countries [15], at least partly because high demand jobs are difficult to combine with family responsibilities. This is even the case in the most gender equal countries as outlined by Seierstad and Kirton [13] in the Scandinavian context.

Basic needs theory in the player context

Basic Needs Theory [16], a more limited version of self-determination theory [17], is a conceptual framework useful for understanding the implications of the perceived social environment on player well-being.

In detail, the theory outlines that we possess three given psychological needs which, when met, allow for personal growth and positive self-development. The first of these needs, *autonomy*, occurs when people feel a sense of volition regarding their choices and decision-making in the context at hand. The need for *competence* is satisfied when individuals perceive the capacity to assert influence, and master tasks within their social or occupational environment. Finally, the need for *relatedness* is met when humans feel a sense of belongingness to a social group, or team.

Applied to footballers, satisfaction of players' needs for autonomy, competence, and relatedness via their team environment should lead to higher levels of well-being. The concept of need satisfaction allows researchers to identify the environmental conditions under which these can be satisfied and so, in turn, promote well-being. One important social environmental factor assumed to nurture the fundamental needs is the motivational climate created by the coach [18, 19]. Coaches may set activities and targets, give recognition, evaluate performance, share their authority and shape the environment. Ideally this creates a motivational climate based on task mastery, learning, effort exertion and improvement (a task involving climate that can lead to increased perceived competence as an end in its own right). This is sometimes termed 'autonomy support'. In contrast, the less helpful ego-involving climate is characterized by interpersonal competition, social comparison and public evaluation, with potentially well-being harming consequences.

Overall, Basic Needs Theory suggests that optimal functioning is promoted by satisfaction of the three basic needs via interactions with the social environment such as other players, staff and coaches [21]. In contrast, frustration of one or all of these needs is postulated to undermine well-being and can lead to the deterioration of psychological and even physical health [17]. Expressed quantitatively, Basic Needs Theory outlines how the three psychological needs act to mediate the links between facets of the perceived football environment (such as the team and its coach) and player well-being. Though the majority of studies have explored male or predominantly male samples, both Reinboth and colleagues [19] and Adie *et al.* [22] demonstrated reasonably similar relationships regardless of gender between perceptions of coaching support, basic need satisfaction and indices of well-being among young adult sport participants.

Aims and hypotheses

We aimed to measure players' perceived autonomy, intrinsic motivation, and team relatedness (their 'basic needs'); their positive and negative well-being; aspects of work-life conflict; alongside their perceptions of both coach and team climate. We hypothesized that greater perceived unmet needs and a poorer environment (*perceived team/coach, work-life balance, uncertainty about the future as a professional football player, and performance pressure*) are associated with lower well-being and greater burnout. Further mediation analysis aimed to test whether unmet needs mediates the relationship between the environment and well-being/ burnout.

MATERIALS AND METHODS

All nine Eredivisie Clubs were invited to take part via a weblink to an online survey. The survey was hosted by Qualtrics (Provo, Utah, United States), a flexible software platform that enables secure and confidential online data collection, automatically adapted to the computer, tablet or smartphone used. We estimated around 200 eligible adult players to have been invited by clubs. 67 individuals accessed the weblink and all completed the online survey.

After completing several demographic questions about age, education, and years playing professional football, players completed the following self-report measures.

Basic needs Drawing from a previous study of needs satisfaction in team sport athletes [23] ten items were used to tap into *autonomy* (e.g. “I feel I can give a lot of inputs to deciding how the practice/training is being carried out”). Need for *competence* has previously been assessed in a sport context using the perceived ability sub-scale of the Intrinsic Motivation Inventory [24] adapted to suit football (e.g. “I am pretty skilled at football”). The competence subscale of the IMI has demonstrated acceptable reliability with young British athletes [23]. Satisfaction of the need for *relatedness* has previously been measured with the five-item Acceptance subscale of the Need for Relatedness Scale [25], which has been adapted to the context of team sport [20]. All three basic needs questionnaires was translated into Dutch by the authors, and back translated for accuracy checks.

Perceived coach autonomy support. Seven items from the Health Care Climate Questionnaire (HCCQ [26]) have been adapted to tap the degree to which players perceived their head coach to be autonomy supportive. Participants responded to the stem, “On this football team...” Example items are “I feel that my coach provides me with choices and options”, and “My coach listens to how I would like to do things”. The responses were anchored on a scale of 1 (strongly disagree) to 7 (strongly agree). Previous research has supported the internal reliability and predictive validity of the adapted seven-item version of the HCCQ (e.g. [19]). This questionnaire was translated into Dutch by collaborators at KNVB, and back translated for accuracy checks.

Work-Life balance/ conflict. This was measured by three items taken from Copenhagen Psychosocial Questionnaire (COPSOQ III, Dutch version). These are answered on a four point Likert scale.

Well-being. The six-item Subjective Vitality Scale (SVS [10]) aims to capture the extent to which players felt alive and energetic in their football participation (e.g., “I feel alive and full of energy”). Responses

are given on a seven-point scale. Sport research has supported the predictive validity as well as the internal reliability of this scale (e.g. [19]). This questionnaire was translated into Dutch by collaborators at KNVB, and back translated for accuracy checks.

Burnout. the Athlete Burnout Questionnaire (ABQ [12]) has sub-scales of emotional and physical exhaustion; sport devaluation; and a reduced sense of accomplishment. Participants answered the Dutch language version on a five-point Likert scale. Previous research has provided evidence for the construct validity and internal reliability of this measure (e.g., [11, 12]).

Research Ethics

The study was approved by the Health and Medical Sciences Faculty Ethics Committee at the University of Surrey, United Kingdom. All data was collected anonymously and with informed consent from all participants.

The spread of time spent playing professional football is given in the table 1 below.

RESULTS

Descriptives. The majority (64%) were aged between 18 and 21; 17% were aged between 22 and 25; and just 7% were aged between 26 and 30. In terms of educational attainment, 3 were at University level, 7 at HBO; 19 at MBO; 13 at VWO; 17 at HAVO; 8 at VMBO. The majority live alone (72%), 27% cohabit, and one person was married/registered partner. 63% are students, 30% are in employment whether as a professional footballer or in another capacity, 3% are housewives, and 4.5% are currently not employed. Length of professional playing career varied from one to over five years with 50% of the sample having played for between two and four years.

Table 1: Descriptives on self-report measures.

	Range	Minimum	Maximum	Mean	Std. Dev.
Perceptions of Coach Autonomy Support	39	10	49	34.19	8.91
Work-Life Conflict	11	4	15	11.14	2.88
Need for Acceptance	20	5	25	18.85	3.94
Need for Autonomy	12	13	25	19.13	2.90
Need for Competence	30	5	35	27.86	4.17
Subjective Vitality Scale	11	7	18	13.03	2.69
Physical/Emotional Exhaustion (ABQ 1)	3.60	1	4.60	2.38	.86
Reduced sense of Accomplishment (ABQ 2)	4.00	1	5.00	2.45	.66
Sport Devaluation (ABQ 3)	3.20	1	4.20	2.19	.73
Athletic Burnout Questionnaire Total	9.40	3.2	12.6	7.03	1.84

The results of all self-report measures are given in table 1. On average, ratings of coach autonomy support were quite high with a mean of 34.19. However, the same was also true of work-life conflict (11.14 out of a total of 15). Scores on the Athletic Burnout Questionnaire were similar to those seen in other sport samples such as a recent study of how the measure performed in 257 young Swiss Olympic sport class attenders [27].

Stepwise linear regression was used to predict burnout and reduced wellbeing. First, all demographic factors were investigated but none

predicted these outcomes. From inspection of the correlations with ABQ scores, work-life conflict and all basic needs measures were entered in stepwise regressions for both ABQ and subjective vitality. The final solution suggested that 48% of the variance in ABQ scores could be explained by a model with three predictor variables: Work-life conflict, need for acceptance and need for competence. This model is shown in table 2.

Table 2: Regression predicting ABQ Total

	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Beta		
(Constant)	16.294	1.275		12.779	.000
Work-Life Conflict	-.285	.058	-.447	-4.902	.000
Need for Competence	-.136	.045	-.308	-3.013	.004
Need for Acceptance	-.123	.047	-.263	-2.586	.012

Further analysis of each of the ABQ subscales also identified the same factors as predictive. Physical/Emotional Exhaustion was predicted by Work-life Conflict and Need for Acceptance. Sport Devaluation was predicted by Work-life Conflict and Need for Acceptance. Reduced sense of accomplishment was predicted by Need for Acceptance and Need for Competence.

Subjective Vitality/Wellbeing was also investigated using stepwise regression. Perhaps because this is less specifically related to football than the ABQ a lower proportion of variance was explained by the final model (20%) which included Need for Autonomy and Need for Acceptance (see table 3 below).

Table 3: Regression predicting Subjective Vitality/Wellbeing

	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.619	2.117		2.182	.033
Need for Autonomy	.259	.113	.279	2.301	.025
Need for Acceptance	.183	.083	.268	2.207	.031

Checks were performed to investigate whether basic needs might play a role in mediating the effect of work-life conflict on wellbeing or burnout. However, the necessary relationship between these variables required for mediation was lacking, suggesting that all the above effects are direct or are mediated/moderated by factors not measured in the current study.

Although coach support did not correlate significantly with any outcomes, it did correlate significantly with two basic needs (need for acceptance $r=.25$, $p<.05$; need for autonomy $r=.35$, $p<.05$). Thus, while a lack of coach support did not itself lead to burnout, it does predict some areas of basic needs not being met.

DISCUSSION

While coaching support has previously sometimes been found to be related to burnout, this was not the case here. However, the levels of coach autonomy support (which rates the overall support from a coach and team) were reasonably high which may have mitigated against its effects. Nevertheless coach support did modestly predict several unmet needs reflecting some findings elsewhere. In one study of male Mexican footballers (15-24 years old), players perceived a more 'authoritarian style' to coaching than 'autonomy supportive' and this strongly predicted frustration of basic psychological needs [28]. It may be that the relative absence of authoritarian coaching styles in the present context mitigated this effect, however there were significant differences in how autonomy supportive coaches were.

However, the relatively supportive coaching context does not imply that all had positive wellbeing in the sample. Levels of work-life conflict in particular, and for some, professional burnout were high, and quite strongly related to each other. This was true regardless of work status (most were either students or in employment), age, years playing football, or weekly hours spent playing, working or studying. Though the study is cross-sectional the results suggest that work-life conflict is a major contributor to burnout in this context.

The other main, and largely independent, contributors to both burnout and low wellbeing were relative deficiencies in all three basic needs - for autonomy, competence and acceptance. These are consistent with Basic Needs Theory, and in tune a wide range of earlier research, as outlined in the introduction. While levels of burnout were broadly consistent with other young elite athletes such as Olympic class attenders [27], some scores fell at or near the ceiling for these measures which should clearly be concerning for those involved in supporting the sport. Though the current data is cross-sectional it is consistent with longitudinal data supporting the direction of effects of 'frustration of basic needs' as causal of burnout (eg. [29]).

Turning to the relevance of gender, a key difference between studies such as Aguirre *et al.* [28], Trépanier *et al.* [29] and others to the present is its exclusively female focus. Those few studies of elite females in sport highlight significant role conflict, even in relatively egalitarian societies such as the Nordic countries [9]. The source of work-life conflict is probably highly varied in the present context as it spanned those in live-in relationships and those not, those in work and those in education, new professionals and established. The source of work-life conflict was not the topic of this study, but other work has highlighted the challenges of a high commitment career for women against the illusion of a 'have it all' lifestyle, that may leave some struggling with the burden [13].

The study currently the only investigation of well-being and burnout in the professional women's game. Although the uptake by invited participants was creditable (about a third), this necessarily resulted in a small sample with all the limitations to the conclusions that can be drawn that this implies. It is not possible to generalize in any detail to the wider context of female professional football given the different local conditions at club and national level. A further limitation is that the exact nature of work-life conflict in the lives of participants was not specified in the present study. Whether they interpreted football as their work, or other paid or unpaid work roles, was not clear. Given the multiple demands of family life, education, employment and football it is however unsurprising perhaps that this indicator appeared

paramount. A further limitation is that the study is cross-sectional and causal relationships cannot be vouchsafed by its results.

Practical Applications and future Research

The results highlight the need to attend to basic unmet needs on the part of a significant proportion of professionals. These have negative consequences, particularly in the context of high work-life conflict. Clubs and coaches, as well as the national association, should remain vigilant to these factors, and the associated burnout and harm to well-being that they are associated with.

Acknowledgments

Dutch versions of various scale items were obtained with the help of Dr. Kirsten Verkooijen (Wageningen University) and Gerard Näring (COPSQ group). Israth Mazumber (University of Surrey) helped construct the Qualtrics online survey. Kirsten van der Ven and Frederike Zwenk (LNVB) were instrumental in enabling the study to occur in too many areas to list but including translation.

Declaration of interest statement

The research was funded by the UEFA Research Grant Programme, and conducted in collaboration with KNVB. I am very grateful for the support both of UEFA and KNVB with which this study would not have been possible.

REFERENCES

1. Côté J, Baker J, Abernathy B. Practice and play in the development of sport expertise. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of Sport Psychology*. New York: Wiley, 2007, 3rd ed., pp. 184 - 202.
2. Greenfield PM, Keller H. Cultural psychology. In C.Spielberger (Ed.). *Encyclopaedia of Applied Psychology*, New York: Elsevier. 2004; 1:545-554.
3. Stambulova N, Alfermann D, Statler T, Côté J. ISSP position stand: Career development and transitions of athletes. *International Journal of Sport and Exercise Psychology*, 2009; 7:395-412.
4. Stambulova NB, Ryba TV. A critical review of career research and assistance through a cultural lens: Towards a cultural praxis of athletes' careers. *International Review of Sport and Exercise Psychology*, 2014; 7:1-17.
5. Gabbett TJ, Mulvey MJ. Time-motion analysis of small-sided training games and competition in elite women soccer players. *Journal of Strength and Conditioning Research*, 2008; 22:543-552.
6. Vescovi JD, Rupf R, Brown TD, Marques MC. Physical performance characteristics of high level female soccer players 12 – 21 years of age. *Scandinavian Journal of Science and Medicine in Sports*, 2011; 21:670-678.
7. Wylleman P, Lavallee D. A developmental perspective on transitions faced by athletes. In M. Weiss (Ed.) *Developmental sport and exercise psychology: A lifespan perspective*. Morgantown, WV: Fitness Information Technology, 2004; pp. 507-527.
8. Christensen MK, Sørensen JK. Sport or school? Dreams and dilemmas for talented Danish football players. *European Physical Education Review*, 2009; 1:115-133.
9. Andersson R, Barker-Ruchti N. Career paths of Swedish top-level women soccer players. *Soccer & Society*, 2018; 1-15.
10. Ryan RM, Frederick CM. On energy, personality and health: Subjective vitality as a dynamic reflection of wellbeing. *Journal of Personality*, 1997; 65:529-565.
11. Raedeke TD. Is athlete burnout more than just stress? A sport commitment perspective. *Journal of Sport & Exercise Psychology*, 1997; 14:391-409.
12. Raedeke TD, Smith AL. Development and preliminary validation of an athlete burnout questionnaire. *Journal of Sport & Exercise Psychology*, 2001; 23:281-306.
13. Seierstad C, Kirton G. Having it all? Women in high commitment careers and work-life balance in Norway. *Gender, Work & Organization*, 2015; 22(4):390-404.
14. Crompton R, Lyonette C. The new gender essentialism: domestic and family 'choices' and their relation to attitudes. *The British Journal of Sociology*, 2005; 56:601-20.
15. WEF. The Global Gender Gap Report 2013. Geneva: World Economic Forum, 2013.
16. Ryan RM, Deci EL. An overview of self-determination theory: An organismic-dialectic perspective. In E. L. Deci, & R. Ryan (Eds.), *Handbook of Self-determination*. Rochester, NY: University of Rochester Press, 2002; pp. 3–37.
17. Deci EL, Ryan RM. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 2000; 11:227-268.
18. Ntoumanis N. A self-determination approach to the understanding of motivation in physical education. *British Journal of Educational Psychology*, 2001; 71:225–242.
19. Reinboth M, Duda JL, Ntoumanis N. Dimensions of coaching behavior, need satisfaction, and the psychological and physical welfare of young athletes. *Motivation and Emotion*, 2004; 28:297–313.
20. Sarrazin P, Vallerand RJ, Guillet E, Pelletier L, Cury F. Motivation and dropout in female handballers: A 21 month prospective study. *European Journal of Social Psychology*, 2002; 32:395–418.
21. Deci EL, Vansteenkiste M. Self-determination theory and basic need satisfaction: Understanding human development in positive psychology. *Ricerche di Psicologia*, 2004; 27:23-40.
22. Adie JW, Duda JL, Ntoumanis N. Autonomy support, basic need satisfaction, and the optimal functioning of adult male and female sport participants: A test of basic needs theory. *Motivation and Emotion*, 2008; 32:189-199.
23. Reinboth M, Duda J. 'Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective' *Psychology of Sport and Exercise*, 2006; 7:269-286.
24. Richer S, Vallerand RJ. Construction and validation of the perceived relatedness scale. *Revue Européenne de Psychologie Appliquée*, 1998; 48:129-137.
25. Williams GC, Cox EM, Kouides R, Deci EL. Presenting the facts about smoking to adolescents: The effects of an autonomy supportive style. *Archives of Pediatrics and Adolescent Medicine*, 1999; 153:959-964.
26. Gerber M, Gustafsson H, Seelig H, Kellmann M, Ludyga S, Colledge F, et al. Usefulness of the Athlete Burnout Questionnaire (ABQ) as a screening tool for the detection of clinically relevant burnout symptoms among young elite athletes. *Psychology of Sport and Exercise*, 2018; 39:104-113.
27. Aguirre G, Tristán R, López W, Tomas I, Zamarripa J. Coach interpersonal styles, frustration of basic psychological needs and burnout: a longitudinal analysis in soccer players. *RETOS-Nevas Tendencias en Educacion Fisica, Deporte y Recreacion*, 2016; 30:132-137.
28. McAuley E, Duncan T, Tammen V. Psychometric properties of the intrinsic motivation inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 1989; 60:48-58.
29. Trépanier SG, Fernet C, Austin S. Longitudinal relationships between workplace bullying, basic psychological needs, and employee functioning: a simultaneous investigation of psychological need satisfaction and frustration. *European Journal of Work and Organizational Psychology*, 2016; 25:690-706.