*Journal of Physical Education and Sport* ® (JPES), Vol. 25 (issue 2), Art 45, pp. 403 - 412, February 2025
online ISSN: 2247 - 806X; p-ISSN: 2247 – 8051; ISSN - L = 2247 - 8051 © JPES

**Original Article**

# Hungarian adaptation of the coach burnout questionnaire

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Published online: February 28, 2025
Accepted for publication: February 15, 2025
**DOI:10.7752/jpes.2025.02045**

**Abstract**
**Problem Statement:** While numerous recent studies have examined burnout across various professions (e.g., nurses, doctors, athletes, and teachers), there is a significant research gap regarding burnout specifically among coaches. Coach burnout represents a critical concern within the sports field, as it has detrimental effects on both athletes and teams. This phenomenon can diminish a coach's motivation, enthusiasm, performance, engagement in training, communication skills, and credibility, ultimately leading to a decline in overall effectiveness. Furthermore, a limited number of validated tools are available for assessing coach burnout. The Coach Burnout Questionnaire has been established as the most reliable instrument for evaluating specific dimensions of burnout that are not addressed by other scales. **Purpose:** This study aimed to analyze the factor structure of the Coach Burnout Questionnaire and to adapt it for use by Hungarian researchers and professionals. Additionally, this research aimed to compare the mental status of Hungarian coaches in terms of burnout with findings from international literature. **Results:** The questionnaire was administered to a sample of 289 coaches (196 females, 92 males; Mean age = 35.44 years, SD = 9.73, range: 21 to 64 years). The initial psychometric properties were identified using exploratory factor analysis, followed by confirmatory factor analysis. The internal consistency of each burnout-related factor in the Coach Burnout Questionnaire was evaluated using Cronbach's alpha coefficient. The statistical evidence supported the proposed three-factor model, as demonstrated by the following measures: $\chi^2$/df ratio = 2.01, Root Mean Square Error of Approximation = 0.06. Cronbach's alpha ranged from 0.65 to 0.89. However, the structure does not align precisely with the original version of the Coach Burnout Questionnaire for items 3, 5, 9, and 15. **Conclusions:** In summary, the psychometric properties of the Coach Burnout Questionnaire were found to be adequate for Hungarian coaches, allowing for its use in future investigations within Hungary. The findings of this study provide significant insights into burnout among Hungarian coaches. By identifying the distinct aspects of burnout, accounting for gender dynamics, and adapting measurement tools, organizations can develop comprehensive support strategies. These strategies aim not only to alleviate burnout but also to enhance job satisfaction, performance, and the overall well-being of the coaching workforce. As a result, sports organizations can cultivate a more resilient and effective coaching environment, benefiting athletes and contributing to the long-term success of sports programs.
**Keywords: Burnout, Coach, Stress, Exhaustion, Mental health**

## Introduction

Freudenberger first identified the phenomenon of burnout in the 1970s, describing it as "the extinction of motivation or incentive, especially when one's devotion to a cause or relationship fails to produce the desired results" (Freudenberger, 1974, p. 159). In collaboration with Richelson, this definition was refined to describe burnout as a "state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected reward" (Freudenberger & Richelson, 1981, p. 13).

This period significantly influenced subsequent researchers in the field. Maslach defined burnout as a syndrome affecting individuals engaged in people-oriented professions. The key manifestations of burnout—emotional exhaustion and depersonalization—contribute to a decline in professional performance (Maslach, 1976). Emotional exhaustion is characterized by a pervasive sense of emptiness resulting from excessive demands, while depersonalization involves hostile, insensitive, or cynical attitudes toward others (Maslach et al., 2001). Maslach later defined burnout as "a psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment that occurs among various professionals who work with others in challenging environments" (Maslach, 1982).

In her most recent definition, she asserts: "Burnout is a psychological syndrome that arises as a prolonged response to chronic interpersonal stressors in the workplace. The three primary dimensions of this response are overwhelming exhaustion, cynicism and detachment from work, and a sense of ineffectiveness and lack of accomplishment" (Maslach & Leiter, 2016, p. 103). Research indicates that burnout is significantly more prevalent in roles characterized by constant interpersonal communication (Burke & Mikkelsen, 2006).


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Recent studies have investigated burnout across various professions, including nursing, medicine, athletics, and education. However, there remains a notable deficiency in research specifically addressing burnout among coaches (DeLange et al., 2004). Existing literature on athlete burnout has identified several contributing factors, which can be categorized into environmental influences (e.g., insufficient social support, negative performance expectations, stressful social interactions, and excessive training), motivational influences (e.g., ego orientation), and personal influences (e.g., low autonomy, perfectionism, and trait anxiety) (Gould & Whitley, 2009).

Historically, the role of a coach was primarily seen as that of a facilitator in athlete development (Goodger et al., 2007). However, the scope of a coach's professional responsibilities and opportunities for self-actualization has since expanded. Today, coaches function as helping professionals, with their effectiveness often measured indirectly by the performance of their athletes or teams. Additionally, coaches bear significant responsibility for the health and well-being of their athletes (González-García et al., 2019).

Coaches take on a wide variety of roles, ranging from managerial positions to that of psychologists. They are characterized by wisdom, curiosity, attentiveness, inspiration, and resilience. Fulfilling these roles, however, requires substantial knowledge and internal resources, which can contribute to burnout (Dovzhik et al., 2021). Professional literature frequently portrays coaching careers as being fraught with risks related to depression, anxiety, and other mental health disorders (Smith, 2018), largely due to the demanding and high-pressure environments inherent in elite sports. Coaches undergo ongoing self-evaluation and peer assessment (Gould & Whitley, 2009), further compounding the pressure to perform. While positive experiences often accompany this pressure, they also lead to numerous negative and stressful situations (Fletcher & Scott, 2010).
Despite being seen as problem solvers (Frey, 2007), many coaches report struggling with stress, fatigue, and even burnout (Thelwell et al., 2008). The consequences of inadequate stress management and the lack of effective coping strategies within coaching contexts have been extensively studied (Price & Weiss, 2000; Lavallee et al., 2009).

Coach burnout represents a significant challenge in sports, with detrimental effects on both athletes and teams (Raedeke & Smith, 2004). This phenomenon negatively impacts coaches' motivation, enthusiasm, performance, engagement in training, communication skills, and credibility, ultimately reducing their overall effectiveness (Bentzen et al., 2014; Lavallee et al., 2009; Price & Weiss, 2000). Additionally, coach burnout is often accompanied by an internal crisis and a profound sense of dissatisfaction. Coaches may struggle to find meaning in their work and question their professional trajectory (Dovzhik et al., 2021). The resulting loss of confidence can severely undermine the relationship between coaches and athletes (Lavallee et al., 2009; Price & Weiss, 2000). Several predictors, including motivational, personal, and sociodemographic factors, contribute to coach burnout (Dovzhik et al., 2021).

According to Schaufeli and Buunk (2003 the symptoms contributing to burnout can be categorized into five distinct types: emotional, physical, cognitive, motivational, and behavioral. In contrast, Goodger et al. (2007) identify specific antecedents of burnout, such as motivational factors, elevated stress and anxiety levels, and avoidance-oriented goals. Long-term fatigue and constant confrontation with athletes, parents, and management can challenge coaches' stress tolerance, potentially leading to emotional exhaustion and decreased performance outcomes (Dovzhik et al., 2021). Numerous studies emphasize negative thought patterns as foundational elements contributing to stress and burnout among athletes, a concept supported by Smith's cognitive-affective stress model (Smith, 1986).

In summary, burnout can lead to various mental and behavioral consequences, including diminished psychological well-being (De Francisco et al., 2016; Gustafsson et al., 2011), interpersonal difficulties (Isoard-Gautheur et al., 2016), an increased risk of dropout (Gould & Whitley, 2009), and depression (De Francisco et al., 2016). Furthermore, the effects of burnout extend beyond the individual experiencing it, negatively impacting the surrounding environment (Raedeke & Granzyk, 2000).

Nevertheless, several positive factors—self-efficacy (Schwarzer & Hallum, 2008), perceived performance (Koeske & Koeske, 1989; Raedeke & Smith, 2004), coping strategies, social support, mental toughness (Chan, 2003), optimism (Gustafsson & Skoog, 2012), diverse teaching strategies (Ben-Ari et al., 2003), enhanced stress tolerance, and a positive mindset (Dovzhik et al., 2021), —can help moderate the relationship between stress and burnout. Additionally, a coach's playing and coaching experience can significantly influence decision-making style and the quality of decisions made in high-pressure situations (Bíró & Balogh, 2020).

**The measurement of Coach Burnout**

The availability of validated tools for measuring coach burnout is limited. In recent years, various researchers have employed different instruments to assess coach burnout, including the Athlete Burnout Questionnaire (ABQ) (Raedeke & Smith, 2001; Choi et al., 2020; González-García et al., 2019; Salehian et al., 2022), Coach Burnout Affect Survey (Seo et al., 2022; Thelwell et al., 2008), interviews (Bentzen et al., 2014; Santiago et al., 2016), Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986; Aktas et al., 2021; Capulis et al., 2020; Dovzhik et al., 2021), narrative methods (McNeill et al., 2017), Oldenburg Burnout Inventory

(OLBI) (Demerouti & Bakker, 2008; Ugrenovic et al., 2020; Wright et al., 2023), and the Recovery-Stress Questionnaire (RESTQ) (Kellmann et al., 2015).

Among these, the Coach Burnout Questionnaire (CBQ), developed by Harris and Ostrow in 2008, has been confirmed as the most valid tool for investigating specific dimensions of coach burnout that are not addressed by other scales (Lundkvist et al., 2014). The CBQ, based on the ABQ (Raedeke & Smith, 2001) and MBI (Maslach & Jackson, 1986), evaluates three primary subscales: Exhaustion, Sport Devaluation (SD), and Reduced Sense of Accomplishment (RSA) (Harris & Ostrow, 2008).

Recent research has focused on examining coach burnout using the CBQ. In 2008, Harris's study (N=36; Mean age=39.64 years, SD=9.94 years) demonstrated satisfactory internal consistency, with Cronbach's alpha coefficients ranging from .80 to .93 for the three subscales (Exhaustion: $\alpha = .94$; Sport Devaluation: $\alpha = .88$; Reduced Sense of Accomplishment: $\alpha = .81$) (Harris & Ostrow, 2008). An earlier Lithuanian version of the CBQ (N=203; Mean age = 35 years, SD = 9.6 years) reported a Cronbach's alpha of .79 (Malinauskas et al., 2010). The most recent study (N=214; Mean age = 36.84 years, SD = 9.9 years) found subscale scores ranging from .71 to .77 (Exhaustion: $\alpha = .759$; Sport Devaluation: $\alpha = .712$; Reduced Sense of Accomplishment: $\alpha = .770$) (Malinauskas & Malinauskiene, 2023).

The first Swedish version of the CBQ (N=277; Mean age = 42.9 years, SD = 10.1 years) reported the following fit indices: Chi-square ($\chi^2 = 306.46$), Comparative Fit Index (CFI = .942), Tucker-Lewis Index (TLI = .930), and Root Mean Square Error of Approximation (RMSEA = .095). This study removed two items (Item 1 and Item 15), with Item 15 being excluded due to cross-loadings on the MPE dimensions. After excluding these items, the fit indices improved: $\chi^2 = 174.692$ (WLSMV), CFI = .967, TLI = .959, RMSEA = .081 (Lundkvist et al., 2014). A later Swedish analysis (N=261; Mean age = 42.8 years) showed non-significant Chi-square statistics ($\chi^2 = 7.79$, $p = .168$). Despite this, Cronbach's alpha ($\alpha = .90$) indicated excellent reliability, and the fit indices suggested an acceptable model fit (CFI = .996, TLI = .992, Standardized Root Mean Square Residual = .015) (Lundkvist et al., 2016).

In 2015, only the Devaluation subscale of the CBQ was used in the UK with a three-time measure protocol (N=195; Mean age = 23 years, SD = 13.26 years). This study demonstrated excellent internal reliability ($\alpha = .85, .86, .92$) (Stebbings et al., 2015). The Australian adaptation of the CBQ (N=406; Age range: 15 to 77 years) reported acceptable reliability coefficients for the subscales: Exhaustion ($\alpha = .93$), Sport Devaluation ($\alpha = .84$), and Reduced Sense of Accomplishment ($\alpha = .80$) (Kilo & Hassmén, 2016).

This study aimed to examine the factor structure of the Coach Burnout Questionnaire and assess the mental health status of Hungarian coaches in the context of burnout. Additionally, we sought to compare our findings with those reported in international literature. We hypothesized that our research would reveal significant gender differences, with female coaches displaying higher scores across all evaluated factors (Physical and Emotional Exhaustion, Reduced Sense of Accomplishment, and Sport Devaluation). Furthermore, we assumed that Hungarian coaches would exhibit higher values for the Emotional and Physical Exhaustion and Reduced Sense of Accomplishment factors while demonstrating lower values for the Sport Devaluation factor compared to international studies.

## Methods

*Participants and Procedures*

A power analysis was conducted using TIBCO Statistica to determine the minimum sample size required. The analysis indicated that at least 279 participants were needed to establish an adequate association (alpha = .05, power = .80). After excluding 39 cases, the final sample consisted of 289 coaches (196 females and 92 males; age: M = 35.44 years, SD = 9.73 years; range: 21 to 64 years).

Before data collection, participants were informed of the primary aim of the study. Informed written consent was obtained from all individuals who participated in the investigation. The data collection procedures followed the Declaration of Helsinki and were approved by the University of Debrecen Ethics Committee (Protocol Number: 6088-2022). While participants were not compensated, we sincerely thank them for their contribution. On average, participants took 7.68 minutes (SD = 2.24) to complete the survey.

Two professional translators translated the CBQ into Hungarian, followed by back-translation to ensure accuracy. A sports psychologist specializing in translation reviewed the back-translation to verify its alignment with the original version. The authors of the CBQ granted legal permission for the researchers to use the copyrighted questionnaire.

The questionnaire was distributed via web survey to 710 active email addresses and through social media platforms. Of these, 289 participants completed a usable questionnaire, resulting in a response rate of 40.7%. Data collection took place from May 22, 2022, to October 24, 2023.

*Instrument*

*Coach Burnout Questionnaire*

The CBQ is a sport-specific tool designed to assess burnout among coaches. Adapted by Harris (2008) from the Athlete Burnout Questionnaire (Raedeke & Smith, 2001; Malinauskas et al., 2010), the statements have been reworded to better fit the coaching context.

The CBQ consists of 15 items, organized into three subscales: Exhaustion, Reduced Sense of Accomplishment (RSA), and Sport Devaluation (SD). Each subscale includes five items. Participants respond to 15 statements using a 5-point Likert scale (1=almost never, 2=rarely, 3=sometimes, 4=frequently, 5=almost always). Higher scores on the scale indicate a greater degree of burnout. Negatively worded items are reverse-scored. A higher total score reflects a greater experience of burnout related to coaching.

*Statistical analysis*

The data were analyzed using IBM SPSS Statistics (Version 20). In the initial phase of the statistical analysis, descriptive statistics (mean, standard deviation, skewness, and kurtosis) were calculated for each item. Subsequently, the maximum likelihood method, combined with the Varimax Rotation Method, was employed for data reduction. The assessment of the maximum likelihood method was conducted using the following goodness-of-fit indices: Chi-square ($\chi^2$), the ratio of Chi-square to degrees of freedom ($\chi^2$/df), and the Root Mean Square Error of Approximation (RMSEA).

Although we could accept a non-significant Chi-square result, we did not rely solely on this index due to its sensitivity to the number of variables involved. Instead, the ratio of $\chi^2$/df was calculated, with values equal to or less than three considered acceptable. Additionally, the RMSEA should be below .08 (Heidrich et al., 2015; Mulaik et al., 1989; Schreiber et al., 2006; Tabachnick & Fidell, 2007; Wheaton et al., 1977). Data adequacy was further confirmed using Cronbach's alpha, with values of .60 or above indicating acceptable internal consistency for our scales (Cronbach, 1951; Takács, 2020).

To examine the suitability of our variables for factor analysis, we conducted the Kaiser–Meyer–Olkin (KMO) test and Bartlett's test of sphericity. A KMO value of .50 or above is considered acceptable, and the Bartlett test should be statistically significant ($p < .05$) (Sajtos & Mitev, 2007).

A one-sample t-test was used to compare the means of our research with those reported in international literature, while an independent two-sample t-test was used to compare gender differences.

## Results

*Descriptive statistics*

The normality of the statements was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. All statements were significant ($p = .000$, $p < .05$), indicating that the elements of the questionnaire do not follow a normal distribution.

**Table I**. Descriptive statistics for CBQ variables (N=289) and Cronbach's alpha for the factors.

| Factor | Cr.Alpha | Item | Mean | SD | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| Emotional and Physical Exhaustion | 0.89 | 8 (-) | 2.06 | 1.15 | 0.62 | -0.68 |
| | | 4 (-) | 2.06 | 1.01 | 0.82 | 0.12 |
| | | 12 (-) | 2.19 | 1.16 | 0.46 | -0.86 |
| | | 10 (-) | 2.18 | 1.15 | 0.41 | -0.85 |
| | | 2 (-) | 2.16 | 1.02 | 0.58 | -0.26 |
| | | 9 (-) | 1.83 | 1.18 | 1.12 | 0.06 |
| | | 3 (-) | 1.82 | 1.02 | 1.29 | 1.29 |
| | | 15 (-) | 2.00 | 1.11 | 0.61 | -0.74 |
| Reduced Sense of Accomplishment | 0.65 | 14 (+) | 3.74 | 0.97 | -0.85 | 0.15 |
| | | 1 (+) | 3.98 | 0.77 | -0.85 | 1.44 |
| | | 13 (-) | 2.03 | 1.11 | 0.55 | -0.86 |
| | | 7 (-) | 1.97 | 1.05 | 0.65 | -0.53 |
| Sport Devaluation | 0.66 | 11 (-) | 2.35 | 1.22 | 0.41 | -0.91 |
| | | 6 (-) | 1.99 | 1.12 | 0.71 | -0.56 |
| | | 5 (-) | 2.26 | 1.19 | 0.42 | -0.92 |

Note: negative statements were marked as follows (-)

A one-sample t-test was conducted to examine the differences between the mean values obtained in our research and the average scores reported in certain international studies.

A one-sample t-test was conducted to compare the mean values obtained in our research with the average scores reported in certain international studies. The mean Emotional and Physical Exhaustion scores were significantly lower ($p = .024$). In contrast, the mean values for the factors of Reduced Sense of Accomplishment ($p = .016$) and Sport Devaluation ($p = .002$) were significantly higher than those reported in the original study by Harris and Ostrow (2008), as well as in samples from Australia (Kilo & Hassmén, 2016), Lithuania (Malinauskas & Malinauskiene, 2023), Singapore (Ong & Zhao, 2018), and the United Kingdom (Woodruff, 2022).

In the gender comparison, no significant difference was found (p = .06) in our study sample, which aligns with previous findings in the literature (Aktaş et al., 2021; Altfeld & Kellmann, 2015; Gencay & Gencay, 2011; Malinauskas et al., 2010). However, this result contrasts with recent studies among coaches working in high schools and universities, which suggested that women tend to experience higher average burnout scores than men (Malinauskas & Malinauskiene, 2023; Singe et al., 2022).

*Exploratory factor analysis (EFA)*

In the second phase, the maximum likelihood method was used in combination with the Varimax Rotation Method for data reduction. The explained variance associated with the three factors was 57.89%. Although this value does not meet the threshold of 60%, the principal component retained over 50% of its original content.

The adequacy of the data subset for the exploratory factor analysis (EFA) was verified using the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity. The KMO index was found to be .89, and Bartlett's test yielded a p-value of .000, confirming the validity of the factor analysis.

All MSA (Measure of Sampling Adequacy) values exceeded the threshold of .50. Additionally, the factor loadings for each statement were above the minimum threshold of .30. According to Sajtos and Mitev (2007), factor loadings should be greater than .30 to prevent the exclusion of variables from the analysis. The factor solution revealed three factors with eigenvalues greater than 1.

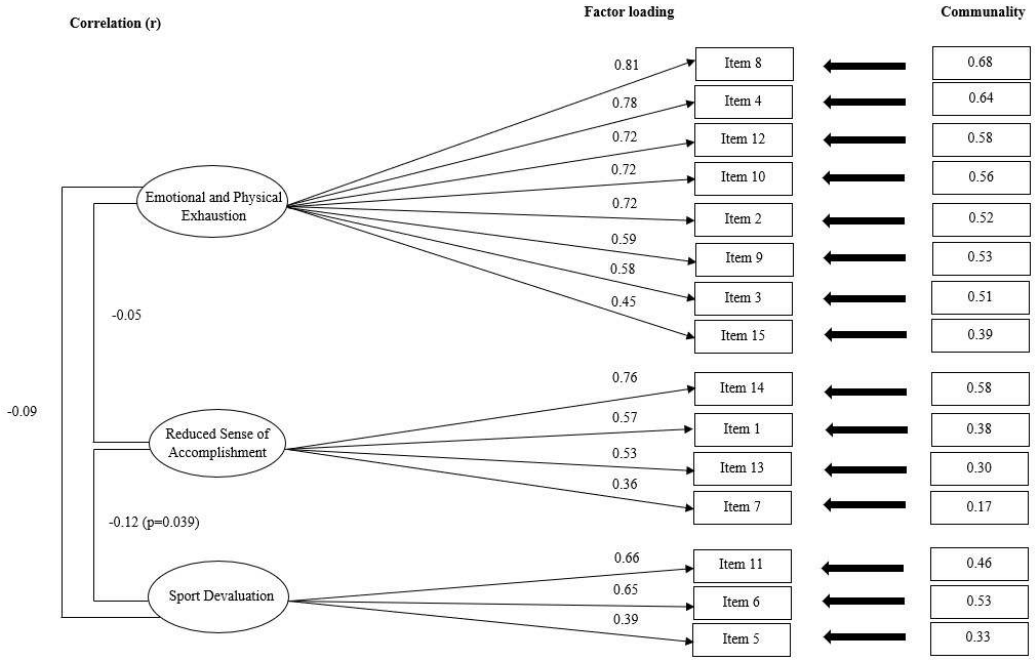


**Figure I.** The findings of the Exploratory Factor Analysis: the Factorial structure of the Coach Burnout Questionnaire applied to Hungarian coaches. The ellipses represent the components of the questionnaire. KMO=.89; Bartlett's test (Sig)=.000; Explained Variance=57.89; Factor Extraction method: Maximum-likelihood; Rotation method: Varimax

Note: the values of the responses to the negative statements were recorded as follows: 1→5; 2→4; 3→3; 4→2; 5→1.

However, our factor structure does not align precisely with the original version of the CBQ regarding items 3, 5, 9, and 15, as shown in Figure I. The Pearson correlation coefficient indicated a weak negative relationship (p = .039) between Factor 2 (RSA) and Factor 3 (SD).

*Confirmatory factor analysis (CFA)*

Confirmatory Factor Analysis (CFA) using Maximum Likelihood Estimation was conducted to identify the validity indices corresponding to the factorial structure extracted from the Exploratory Factor Analysis (EFA). To assess construct validity, the fit between the original model and our data matrix was evaluated using the following criteria: the ratio of chi-square to degrees of freedom ($\chi^2$/df) and the Root Mean Square Error of Approximation (RMSEA). In line with established thresholds reported in the literature (Byrne, 2011; Hair et al., 2019; Rodrigues et al., 2022), both the $\chi^2$/df ratio (2.01) and RMSEA (.06) were considered acceptable, adequate and satisfactory. Despite the significance of $\chi^2$, the results suggest that the model demonstrates a good fit with the data. To assess the internal consistency of the three factors identified in the factor structure analysis, Cronbach's α was calculated. A Cronbach's α value higher than .60 is considered acceptable (Cronbach, 1951; Takács, 2020). The subscales "Physical and Mental Exhaustion" (α = .89), "RSA" (α = .65), and "Sports

Devaluation" (α = .66) all showed acceptable reliability, with values above .60. Table 1 presents Cronbach's alpha values for the evaluated scales.

As mentioned previously, the factorability of the variable set was examined. The KMO index values exceeded .80, indicating that the data set is highly suitable for factor analysis (Kaiser, 1974). Additionally, Bartlett's test of sphericity yielded significant results, further confirming the suitability of the variables for factor analysis (Snedecor & Cochran, 1989). The reliability of the variables associated with the factors is thus confirmed.

**Discussion**

In recent years, the study of coach burnout has gained considerable attention, with the Coach Burnout Questionnaire (CBQ) consistently recognized as one of the most reliable instruments for measurement. Our research aimed to adapt the CBQ for use by Hungarian researchers and specialists while also comparing the mental state of Hungarian coaches regarding burnout with findings from international studies.

When applied to Hungarian coaches, the factorial structure analysis of the CBQ revealed a structure largely consistent with the original version proposed by Harris and Ostrow (2008). Although minor variations were observed across some items, the factors themselves remained intact. For instance, the Swedish version of the CBQ had modified its factor composition, resulting in the exclusion of items 1 and 15 (Lundkvist et al., 2014). In contrast, our study did not find any items that needed to be excluded, though their placement within the factors changed. Specifically, Item 5 (originally RSA) was reassigned to the Sport Devaluation (SD) factor, while Items 3, 9, and 15 (originally SD) were moved to the Emotional and Physical Exhaustion factor in the Hungarian version.

The reliability of the Hungarian version of the CBQ was supported by Cronbach's alpha coefficients greater than .60 for the three components identified through the factorial structure. However, compared to the original version, the internal consistency for each burnout component was slightly reduced in our analysis. In contrast to findings from international literature (Lundkvist et al., 2014; Malinauskas & Malinauskiene, 2023), our study identified discrepancies in the correlation matrices. Notably, a modest but significant correlation was found only between the RSA and SD factors (r= -.12; p=.039).

Our hypothesis suggested that Hungarian coaches would show higher levels of Emotional and Physical Exhaustion and a Reduced Sense of Accomplishment but lower levels of Sport Devaluation compared to previous international research. Additionally, we anticipated significant gender differences, with female coaches reporting higher burnout scores across all evaluated factors (Physical and Emotional Exhaustion, Reduced Sense of Accomplishment, and Sport Devaluation).

The results of our study indicated that the mean scores for Emotional and Physical Exhaustion were significantly lower (p = .024), while the mean values for Reduced Sense of Accomplishment (p = .016) and Sport Devaluation (p = .002) were significantly higher than those reported in the original study (Harris & Ostrow, 2008), as well as in samples from Australia (Kilo & Hassmén, 2016), Lithuania (Malinauskas & Malinauskiene, 2023), Singapore (Ong & Zhao, 2018) and the United Kingdom (Woodruff, 2022).

Regarding demographic data, the comparison between genders in our study showed no significant differences (p = .06), which is consistent with previous literature (Aktas et al., 2021; Altfeld & Kellmann, 2015; Gencay & Gencay, 2011; Malinauskas et al., 2010). However, our findings contrast more recent studies involving high school and university coaches, which indicated that female participants reported higher levels of burnout than their male counterparts (Malinauskas & Malinauskiene, 2023; Singe et al., 2022).

To the best of our knowledge, the issue of coach burnout has not yet been empirically studied in Hungary. As such, further research is needed to assess the mental well-being of coaches in Hungary to inform practical interventions to mitigate burnout.

**Conclusion**

In conclusion, based on the tests, fit indices, and reliability assessments, our model emerges as the most interpretable among the available constructions and is considered suitable for further analysis and conclusions. Future research efforts should focus on validating the factor structure of the CBQ and conducting a detailed examination of the varying associations between specific resources and each burnout dimension. Integrating the Hungarian version of the CBQ could significantly enhance the practical applications of sports psychology and contribute to the development of preventive programs addressing coach burnout, such as the burnout syndrome psycho-correction program (Bezliudnyi et al., 2019) established in Ukraine. Creating intervention strategies has become essential for improving individuals' ability to respond effectively to stressors (Nikolaos, 2012).

The adaptation of the Coach Burnout Questionnaire for the Hungarian context emphasizes the importance of culturally relevant assessment tools. Organizations can achieve greater accuracy in their findings by ensuring that burnout measurement instruments are aligned with local nuances. This, in turn, leads to more effective identification of burnout levels and the specific needs of coaches, paving the way for tailored interventions that resonate with the local coaching culture and environment. Further research should explore the relationship between burnout in the Hungarian coaching population and other influencing factors to better understand what impacts their mental well-being.

By analyzing the distinct experiences of Hungarian coaches in relation to international benchmarks, stakeholders can develop a comprehensive understanding of burnout. This customized approach to support programs is critical, as it acknowledges that burnout cannot be addressed with a one-size-fits-all solution. Therefore, organizations should create targeted workshops, mental health resources, and peer support systems, as well as develop actionable wellness programs that specifically address the unique burnout challenges their coaching staff face. Such initiatives not only improve coaches' morale but also have the potential to enhance overall athlete performance by fostering a more motivated and effective coaching staff.

Our findings suggest that there are no significant differences in burnout levels between male and female coaches, which contrasts with certain international studies (Malinauskas & Malinauskiene, 2023; Singe et al., 2022) that report higher burnout rates among female coaches. This discrepancy warrants further investigation into the unique pressures and experiences faced by coaches of different genders. A deeper understanding of these dynamics could inform the development of gender-sensitive interventions, addressing challenges such as work-life balance, societal expectations, and support systems within sports organizations.

Additionally, examining the impact of factors such as sport type, coaching levels, years of experience, health-related behaviors, the gender of athletes coached, and organizational cultures on burnout could yield important insights. These findings could further inform training and support initiatives for coaches.

The insights gained from this study advance our understanding of burnout among Hungarian coaches. By recognizing the unique dimensions of burnout, considering gender dynamics, and adapting measurement tools, organizations can create comprehensive support strategies. These strategies aim not only to reduce burnout but also to enhance job satisfaction, performance, and the overall well-being of the coaching workforce. As a result, sports organizations can foster a more resilient and effective coaching environment, benefiting athletes and contributing to the long-term success of sports programs.

**Funding:** This research was supported by the "Tématerületi Kiválósági Program-Egészség alprogram (TKP 2021-EGA-20)" project.

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**APPENDIX A**

Coach Burnout Questionnaire

| | Szinte soha | Ritkán | Néha | Gyakran | Szinte mindig |
|---|---|---|---|---|---|
| 1. Sok értékes dolgot érek el edzőként. | 1 | 2 | 3 | 4 | 5 |
| 2. Az edzősködés annyira kimerít, hogy nehezemre esik más tevékenységekre energiát fordítani. | 1 | 2 | 3 | 4 | 5 |
| 3. Sokkal jobb lenne, ha az erőfeszítést, amit az edzősködésre fordítok, máshol kamatoztathatnám. | 1 | 2 | 3 | 4 | 5 |
| 4. Teljesen kimerültnek érzem magam az edzősködéstől. | 1 | 2 | 3 | 4 | 5 |
| 5. Nem haladok előre az edzői pályámon. | 1 | 2 | 3 | 4 | 5 |
| 6. Már nem foglalkozok annyit az edzői teljesítményemmel, mint korábban. | 1 | 2 | 3 | 4 | 5 |
| 7. Nem teljesítek edzőként a képességeimnek megfelelő szinten. | 1 | 2 | 3 | 4 | 5 |
| 8. Úgy érzem, hogy az edzői munkám teljesen kifacsar. | 1 | 2 | 3 | 4 | 5 |
| 9. Már nem annyira szeretek edzősködni, mint korábban. | 1 | 2 | 3 | 4 | 5 |
| 10. Úgy érzem, hogy az edzősködés, fizikálisan teljesen kimerít. | 1 | 2 | 3 | 4 | 5 |
| 11. Már nem aggódok annyira az edzői sikerességem miatt. | 1 | 2 | 3 | 4 | 5 |
| 12. Fizikálisan és mentálisan kimerültnek érzem magam az edzői pálya követelményei miatt. | 1 | 2 | 3 | 4 | 5 |
| 13. Minden erőfeszítésem ellenére, nem vagyok olyan jó edző, mint kellene legyek. | 1 | 2 | 3 | 4 | 5 |
| 14. Sikeresnek érzem magam edzőként. | 1 | 2 | 3 | 4 | 5 |
| 15. Negatív érzéseim vannak az edzői pályával kapcsolatban. | 1 | 2 | 3 | 4 | 5 |