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RESEARCH ARTICLE

Self-Oriented and Socially Prescribed Perfectionism Among Hungarian Professional Folk Dancers

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Introduction: Those characterized by high levels of self-oriented or socially prescribed perfectionism strive to meet high expectations. Dancers are prone to perfectionism and related negative psychological factors.
Aims: In this study, we investigated how perfectionism among Hungarian professional folk dancers is related to certain psychological factors.
Methods: Ninety-six professional dancers completed an online survey (47.9% male, 52.1% female, mean age: 29.91 years, *SD* = 8.46). To measure perfectionism, we utilized Hewitt and Flett's Multidimensional Perfectionism Scale. We carried out a moderation analysis based on linear regression to measure the associations between the perfectionism subscales and various psychological variables and examine whether the two subscales moderated each other's effects.
Results: Higher levels of socially prescribed perfectionism were associated with higher perceived stress, burnout, weaker concentration, and lower coachability. On the other hand, self-oriented perfectionism showed fewer associations; however, these were indicative of a better mental state: those with higher self-oriented perfectionism showed lower levels of burnout, better concentration, and higher coachability. We also found that the two dimensions of perfectionism moderate each other's effects. In the case of concentration and coachability, self-oriented perfectionism may mitigate the detrimental effects of socially prescribed perfectionism. In contrast, in the case of perceived stress, self-oriented perfectionism may actually exacerbate the harmful effects of socially prescribed perfectionism.
Conclusions: The results showed significantly more dysfunctions associated with socially prescribed perfectionism. On the other hand, self-oriented perfectionism was associated with adaptive psychological outcomes.

Keywords: perfectionism, dancers, perceived stress, burnout, coping skills

Introduction

Perfectionism is a phenomenon that has been studied for decades, and its interpretation has changed and differentiated significantly over time. While initially considered to be a purely psychopathological condition associated exclusively with psychological problems (Burns, 1980; Pacht, 1984; Ranieri et al., 1987), it has now become clear that it is a multidimensional psychological construct that is associated with both positive and negative psychological states (Frost et al., 1990, 1993; Gaudreau, 2019; Stoeber & Otto, 2006).

Dance artists are often described as having a tendency towards perfectionism, which includes technical knowledge, artistic performance, and physical appearance. However, research results suggest that "true" perfectionism

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is rare; instead, we can see that elements of perfectionism are common among professional dancers (Hill et al., 2020; Nordin-Bates et al., 2011). As part of our larger research of professional folk dancers in Hungary, this study examines multidimensional perfectionism among these dancers and the psychological factors associated with it.

Perfectionism

Although there is a wide range of literature on perfectionism, it is difficult to provide an exact definition for the concept. Comparing studies on the subject, perfectionism can be described as setting unrealistically high goals, striving for flawless performance, and selective attention to failure, as well as overly critical evaluation and excessive self-criticism (Frost et al., 1990; Gaudreau, 2021; Hewitt & Flett, 1991). Gaudreau (2019) distinguishes between striving for perfection and striving for excellence, pointing out that a person striving for excellence may feel satisfaction upon achieving their goal, while a person striving for perfection is incapable of feeling satisfied.

Until the 1990s, perfectionism was considered a dysfunctional trait associated with numerous negative psychological problems (Burns, 1980; Pacht, 1984; Ranieri et al., 1987). During the same period, Hamachek (1978) established a two-dimensional theory by distinguishing between normal and neurotic perfectionism.

A significant change in the interpretation of the phenomenon began in the 1990s when two independent research groups described perfectionism as a multidimensional construct (Frost et al., 1990; Hewitt & Flett, 1991). Frost et al. (1990) evaluated the perfectionist experience according to six criteria (Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions, and Organization). In some of these areas, they also discovered some positive personal characteristics associated with perfectionism. Hewitt and Flett's (1991) three-dimensional model acknowledges the interpersonal aspects of perfectionism, distinguishing between self-oriented, other-oriented, and socially prescribed perfectionism.

The Three-Dimension Model of Perfectionism

In this study, we examined our sample using the three-dimensional approach developed by Hewitt and Flett (1991). The authors moved beyond two-dimensional models that divide perfectionism into aspects that are positive or negative (Frost et al., 1993; Rice et al., 1998; Terry-Short et al., 1995), and instead examined perfectionism from a social perspective based on the idea that it involves both intrapersonal and interpersonal components. Accordingly, they distinguish between self-oriented, other-oriented, and socially prescribed perfectionism. Individuals with high self-oriented perfectionism have high expectations of themselves, set high goals, and try to perform as flawlessly as possible. This kind of perfectionism can be a strong internal driving force for the individual, acting as a supportive factor. However, it may also result in dissatisfaction with less than ideal performance and excessive self-criticism. Other-oriented perfectionism involves imposing expectations of perfect performance on others, such as colleagues, friends, family, or strangers; therefore, it is directed outwards. Individuals with high other-oriented perfectionism may experience frustration when others fail to meet their expectations, which can be a source of conflict and may negatively impact the individual's social relationships. Socially prescribed perfectionism is rooted in an individuals' belief that significant others expect them to perform perfectly and that they must meet these expectations to earn and keep their love, respect, or appreciation. Failure to meet such expectations leads to rejection and devaluation (Hewitt & Flett, 1991).

Frost et al. (1993) compared the dimensions of the two influential concepts developed by Frost et al. (1990) and Hewitt and Flett (1991). They concluded that the dimensions of the two frameworks mentioned above show similarities: Frost's Personal Standards and Organization, along with Hewitt-Flett's self-oriented and other-oriented perfectionism, can be classified as positive strivings. In contrast, Frost's Concern over Mistakes, Parental Criticism, Parental Expectations, Doubts about Actions, and Hewitt-Flett's socially prescribed perfectionism can be classified as maladaptive evaluation concerns. Furthermore, positive strivings were associated with positive affect, while maladaptive evaluation concern were associated with negative affect.

Interaction Between Dimensions of Perfectionism

Considering any two- or multidimensional model of perfectionism, it can be seen that certain aspects of perfectionism are associated with positive outcomes, while other aspects are associated with adverse outcomes. Despite this, a positive correlation can often be observed between the dimensions of perfectionism; for example, those with high levels of perfectionistic strivings often also exhibit high levels of perfectionistic concerns (Stoeber & Otto, 2006). This raises the question of what outcomes can be expected if both the positive and negative aspects are high.

Based on the model proposed by Stoeber and Otto (2006), perfectionistic strivings and perfectionistic concerns can be used to categorize individuals into three groups. Non-perfectionists are those for whom both values are low or only perfectionistic concerns are high (since in their model, perfectionism cannot be interpreted in the absence of a desire for high performance). Healthy perfectionists are those for whom perfectionistic strivings are high but concerns are low, and unhealthy perfectionists are those for whom both values are high. Thus, the positive effects of perfectionistic strivings manifest only in the absence of elevated perfectionistic concerns. The authors list several studies demonstrating the advantages of healthy perfectionists over unhealthy perfectionists (and often non-perfectionists as well) across several psychological domains, such as self-esteem and academic performance (Stoeber & Otto, 2006). Results relevant to the present study are that healthy perfectionists are characterized by lower anxiety (Dixon et al., 2004; Mobley et al., 2005), easier social cooperation and better social functioning (LoCicero et al., 2000; Parker, 1997; Rice & Dellwo, 2002), as well as stronger personal control and a more internal locus of control (Periasamy & Ashby, 2002; Rice et al., 2003) compared to unhealthy perfectionists or non-perfectionists. It should be noted, however, that a significant portion of the research listed above was conducted with undergraduates or adolescents.

In their 2x2 model, Gaudreau and Thompson (2010) attempted to further refine perfectionism as a personality trait by suggesting that the two dimensions, personal standards perfectionism and evaluative concerns perfectionism, may co-occur in an individual's personality. According to the model, individuals are not considered perfectionists if neither component is active. Adaptive (healthy) perfectionists possess high personal standards but low evaluative concerns, while maladaptive (unhealthy) perfectionists are those with high evaluative concerns and low personal standards. The fourth category of the model is characterized by similarly high levels of the two perfectionism components, which the authors refer to as mixed perfectionism. In their research on university students, Gaudreau and Thompson examined the effects of perfectionism on academic self-determination, academic satisfaction, and general positive and negative affects. They found that the most favorable outcomes were observed for healthy perfectionism, while unhealthy perfectionism yielded the least favorable outcomes. Additionally, for mixed perfectionists, personal standards were found to reduce the negative impact of evaluative concerns. In their study on burnout, Rice and Liu (2020) also demonstrated the buffering effect of perfectionistic striving against the negative impact of concerns among research and development workers regarding cynicism.

Cumming and Duda (2012) carried out cluster analysis among vocational dance students and, consistent with Gaudreau and Thompson's (2010) model, found that the four-cluster solution was the most optimal. Based on their results, positive affect was higher in the pure personal standards cluster than in the non-perfectionist cluster and the pure evaluative concerns cluster. The mixed perfectionist cluster was between these, scoring lower than the pure personal standards cluster but above the pure evaluative concerns and non-perfectionist clusters, with no significant differences between the two. Interpreting the differences through the lens of moderation, positive affect is increased by high personal standards, but the effect is moderated by high concerns, partially reducing it. In the case of negative affect, the differences between the clusters suggest that concerns increase negative affect, regardless of the presence of personal standards (i.e., we would not expect a moderating effect here). In the case of physical and mental exhaustion, no clear conclusions can be drawn from a moderation analysis perspective. However, the data indicates that the pure personal standards cluster has lower exhaustion compared to both the pure evaluative concerns and mixed perfectionist cluster.

Using the theoretical framework of Cumming and Duda (2012), Nordin-Bates et al. (2017) found that personal standards cannot mitigate the detrimental effects of evaluative concerns in case of burnout and motivational regulation among dancers. Hill et al. (2020) also examined athletes and dancers using the 2x2 model developed by Gaudreau and Thompson (2010). Their results show that, among the groups, individuals in the pure evaluative concerns group exhibit the worst prospects in terms of mental health problems.

Moving beyond studies that rely on grouping or clustering, Stoeber (2011) suggests that perfectionistic concerns suppress the positive effects of strivings, such that the effect of the two aspects is only visible if the overlap between the two is controlled for in the study. He based this conclusion on research in which he used regression or partial correlation to control for the effects of different aspects of perfectionism on each other (e.g., Sagar & Stoeber, 2009; Stoeber et al., 2007). On the other hand, Hill (2014) cautioned against the use of partialing, warning that if the correlation between the factors in the model is too strong, then the residual part of the variables remaining after partialing may be conceptually difficult to interpret. However, Hill and Curran's (2015) meta-analysis found that the effects of perfectionistic concerns are not significantly altered by partialing, and that changes are observed mainly in the case of perfectionistic striving, which, after partialing, was associated with more positive outcomes.

In summary, research examining different aspects of perfectionism highlights that the actual effects of these aspects only become observable when the overlap between them is controlled (for an extensive review, see Stoeber, 2011). Moderation research on this topic is scarce and primarily focuses on cases in which both positive and negative aspects are high. Evidence exists that the positive aspect of perfectionism can serve as a buffer against the detrimental aspect, as well as evidence that the negative aspect masks the effect of the positive. However, it is difficult to reveal the actual range of moderating effects through categorization-based research. Moreover, previous studies mainly focused on conceptual approaches that divide the phenomenon into perfectionistic strivings and concerns. To our knowledge, no moderation analysis has been conducted within the interpretative framework proposed by Hewitt and Flett (1991), which divides perfectionism into self-oriented, other-oriented, and socially prescribed perfectionism. Therefore, we consider this approach to be one of the novel elements of the present research.

The Relationship Between Perfectionism and Mental Health

Numerous studies have investigated the associations between perfectionism and mental health among athletes and dancers. While adaptive forms of perfectionism can serve as supportive factors, providing individuals with higher levels of motivation, self-confidence, and better coping skills (Dunn et al., 2014; Stoeber, 2011), maladaptive forms are more strongly linked with anxiety, higher levels of perceived stress, burnout, lower self-esteem, and higher fear of failure (Nordin-Bates, 2014; Nordin-Bates et al., 2017; Quested et al., 2014).

Investigating Hewitt and Flett's (1991) model in a community sample of young adults, Molnar et al. (2006) found that the self-oriented dimension of perfectionism was associated with higher positive and lower negative affects, while the socially prescribed dimension was linked to lower positive and higher negative affects. Furthermore, they demonstrated a relationship between the perfectionism dimensions and perceived physical health via positive and negative affects. Partly contradicting this, Mor et al. (1995) found that both socially prescribed perfectionism and self-oriented perfectionism were associated with higher levels of debilitating anxiety, lower happiness while performing, and lower goal satisfaction in a sample of performing artists. Stevenson and Akram (2022) also found both self-oriented and socially prescribed perfectionism to be associated with perceived stress, the inadequate self, and the hated self among undergraduates. However, both authors also found a positive correlation between self-oriented and socially prescribed perfectionism, which raises the question of how these associations may have differed if the partialing approach proposed by Stoeber et al. (2011) had been used.

Perfectionism and Perceived Stress

Perceived stress is defined as how individuals interpret the amount of stress to which they are exposed at a given time or over a given time period (Phillips, 2013). According to studies conducted among university students, perfectionism is associated with higher levels of perceived stress through various psychological dysfunctions (Stevenson & Akram, 2022). Perfectionistic concerns and self-critical perfectionism have been strongly associated with higher levels of distress through the mediating effects of hassles, avoidant coping, and perceived social support (Dunkley et al., 2000, 2003). Personal standards were also positively associated with distress as shown by bivariate correlation analysis; however, this relationship disappeared after controlling for perfectionistic concerns. Additionally, an interesting interaction was observed between personal standards and hassles in relation to distress: the moderation analysis revealed that hassles resulted in higher levels of perceived distress in the presence of high personal standards (Dunkley et al., 2000). Other features typical of maladaptive perfectionism, such as concerns about mistakes, doubts about actions, and fear of negative evaluation, can also lead to higher levels of perceived stress (Shafique et al., 2017; Smith et al., 2017). A study conducted among coaches also found that adaptive perfectionism was not associated with elevated stress levels, while maladaptive perfectionism results in more threatening perceptions of stress (Tashman et al., 2010).

Perfectionism and Burnout

Burnout syndrome (hereafter: *burnout*) is a state of emotional, physical, and cognitive exhaustion caused by prolonged exposure to various stressors. Its three key dimensions are overwhelming exhaustion, a reduced sense of accomplishment, and a feeling of disconnection from work (Maslach & Leiter, 2016).

There are several studies across different populations on the relationship between perfectionism and burnout (Garratt-Reed et al., 2018; Rice & Liu, 2020; Tashman et al., 2010). The results clearly show that perfectionism is

associated with burnout and that its maladaptive form, perfectionistic concern, poses a significant risk for burnout. This is less typical of perfectionistic aspiration strivings (i.e., adaptive perfectionism).

Research conducted with athletes also supports the notion that perfectionism can be a predictor of athlete burnout (Gustaffson et al., 2008; Olsson et al., 2022). Hill and Curran's (2015) meta-analysis, spanning sport, work, and education-related domains, found that perfectionistic strivings were negatively correlated with burnout in sport-related studies, while perfectionistic concerns showed positive associations. Yang et al. (2023) found a similar result among athletes in their systematic review and meta-analysis: self-oriented perfectionism was shown to be either weakly related or unrelated with burnout, whereas socially prescribed perfectionism showed positive relationships.

Jowett et al. (2016) examined the relationship between burnout and perfectionism among athletes using Gaudreau and Thompson's (2010) 2x2 model. They found that pure personal standards perfectionism was not associated with burnout, while pure evaluative concerns perfectionism was more strongly correlated with burnout than the other dimensions of the model. Similarly, Cumming and Duda (2012) found that dancers with pure evaluative concerns perfectionism or mixed perfectionism reported higher emotional and physical exhaustion than dancers with pure personal standards perfectionism. In contrast, Hall and Hill (2012) argued against the idea that only perfectionistic concerns have a detrimental effect on mental health. According to the authors, personal strivings can also have a debilitating effect and lead to burnout, as they may be associated with a mindset where achievement is closely tied to self-worth and marked by constant self-criticism, obsessive mistake-avoidance, harmful rumination, and feelings of personal inadequacy.

Perfectionism and Coping Skills

Research among athletes has shown that certain psychological skills, such as psychological coping skills in sports, contribute significantly to performance (Gyömbér, 2017; Smith et al., 1995; Szájer, 2019) and result in better mental health outcomes for athletes (Brown, 2024; Fry et al., 2021). Such skills include concentration and coachability.

Concentration is the sustained maintenance of attention, enabling individuals to focus on a task by filtering out distractions (Gyömbér, 2017), and is shown to increase engagement (Özcan, 2021). It has also been associated with higher self-esteem (Smith et al., 1995) and well-being (Brown, 2024), as well as with perfectionism. Among dancers, perfectionistic concerns have been observed to have an inhibitory effect on dispositional flow in dance, a key element required for deep concentration, when perfectionistic striving is low. However, this effect is not observed in the case of high striving (Arslan & Altan-Atalay, 2023).

The literature suggests that a further contributor to performance is the athlete's relationship with the coach and how this relationship is perceived by the athlete (Jowett & Cockerill, 2003). Simons and Bird (2022) describe the coach-athlete relationship as one of the major stressors to an athlete's psychological well-being, while the behavior of the dance director is also one of the strongest drivers of stress in dancers (Noh et al., 2009). The construct of coachability describes how an individual receives, processes, and responds to feedback (Ober et al., 2024). Coachability in sports can be defined as a behavior that enhances an athlete's teachability and is considered an important predictor of athletic success (Giacobbi, 2000). It also reflects the athlete's ability to learn and accept coaching feedback and criticism (Favor, 2011). Fry et al. (2021) reported a positive association between the perception of a caring climate and coachability, while Brown (2024) reported a negative association between coachability and stress among athletes. To our knowledge, no academic paper has been published on the relationship between coachability and perfectionism; thus, this research may provide new insights into this area. Examining related constructs, it was found that individuals classified as healthy perfectionists (characterized by high standards and low concerns) were more willing to cooperate with others (LoCicero et al., 2000), had higher levels of agreeableness and conscientiousness (Parker, 1997), and exhibited greater social integration (Rice & Dellwo 2002).

Hungarian Folk Dance Groups

Hungarian folk dance is a branch of Hungarian folk art. It is performed by individuals, couples, or groups, and is accompanied by music and singing. Folk dance traditions are actively present in both the performing arts and dance education. There are currently four professional folk dance companies in Hungary: the Hungarian National Dance Ensemble (Magyar Nemzeti Táncegyüttes, n.d.), the Hungarian State Folk Ensemble (Magyar Állami Népi Együttes, n.d.), the Danube Art Ensemble (Duna Művészegyüttes, n.d.) and the Dezső Fitos Company (Fitos Dezső Társulat, n.d.). In addition to these, a few dozen amateur folk dance groups are active throughout Hungary and beyond its borders.

Professional folk dance companies in Hungary perform regularly in theatres and at events throughout the year. As the preparation for these performances involves daily rehearsals and training sessions, making dance a full-time occupation for the members of these companies. Since Hungarian folk dance involves individual, pair, and group elements, the companies are organized around pairs, usually maintaining an equal number of male and female dancers. Both male and female dance troupes have soloists, and a male and a female dance leader are normally appointed from among the dancers. Companies are led by one or more artistic directors and sometimes a manager who deals with the operational aspects of the company.

To date, only a few studies have examined Hungarian folk dancers from a psychological point of view. Medveczné Atinay et al. (2022) investigated the mental well-being and coping methods of dancers during the COVID-19 lockdown period, while Szászi and Szabó (2021) explored dancers' body satisfaction, body attitudes, and self-esteem. Building on this research, we aimed to examine the psychological state of professional folk dancers from additional perspectives.

Research Aims

The literature presented earlier suggests that dancers are prone to perfectionism and certain negative psychological characteristics associated with it (Hill et al., 2020; Nordic-Bates et al., 2011). However, no such studies have been conducted specifically among folk dancers, and studies investigating the mental states of Hungarian folk dancers are scarce in general (Medveczné Atinay et al., 2022; Szászi & Szabó, 2021). Therefore, the present study aims to investigate these factors among professional folk dancers in Hungary.

Accordingly, we formulated three hypotheses and one research question for this study.

Based on previous results, we hypothesize that folk dancers will have higher levels of perfectionism compared to the general population (H1). We also theorize that (H2) self-oriented perfectionism will be associated with certain psychological outcomes (i.e., lower levels of perceived stress, burnout, and worry, as well as higher levels of concentration and coachability). In contrast, (H3) socially prescribed perfectionism will be linked to more negative effects on these factors. Following Stoeber's (2011) recommendation, the analyses are carried out while controlling for the potential overlap between the two perfectionism scales.

Moderation analyses on perfectionism are rare, and to our knowledge, none have applied the Hewitt and Flett (1991) model. Studies offering insights into moderation effects have been based on grouping or clustering individuals along the adaptive and maladaptive axes of perfectionism (for a detailed discussion, see the section entitled "Interaction between dimensions of perfectionism"), and the results are inconclusive. Therefore, an additional research question of the present study is whether self-oriented and socially prescribed perfectionism not only coexist with each other but also whether they also influence each other's effects. This influence can take two forms: the two perfectionism scales can either mitigate or enhance each other's effect, that is, it is possible that high levels of self-oriented perfectionism may protect against the adverse effects of socially prescribed perfectionism (i.e., reduce its negative effect), but it is also possible that high levels of self-oriented perfectionism may aggravate the effect of socially prescribed perfectionism.

To our knowledge, no prior study has investigated the interaction between self-oriented and socially prescribed perfectionism; thus, the present study is the first to explore such moderating relationships.

Methods

Sample and Procedure

An online questionnaire was used to examine Hungarian professional folk dance artists across psychosocial dimensions. The survey was conducted between March and June 2024. Following a written request to the company leaders, the survey was completed online. Respondents were assured of the anonymous and voluntary nature of the survey and were assured that they could discontinue the survey at any time. Ethical permission for the study was granted under the reference number TUKEB BM/819-1/2024.

There are currently four major professional folk dance companies in Hungary, employing approximately 130–140 folk dance artists. In the current survey, we reached 96 of these dancers (see Appendix Table 1), which represents approximately 70% of the Hungarian professional folk dance artist population.

The gender distribution of the sample was relatively balanced, with 47.9% male and 52.1% female, which corresponds to the typical gender distribution of the population given the pair-based nature of this dance style.

Participants ranged in age from 19 to 51 years old, with a mean age of 29.91 years (*SD* = 8.46). In terms of educational level, a significant part of the sample held higher education degrees. Regarding marital status, approximately one-third of the participants were single, while two-thirds were in a relationship. Three-quarters of the sample reported having no children. On average, participants had been dancing for an average of 21.52 years (*SD* = 8.55), with a range from 6 years to 43 years of dancing experience. Of these, they had been dancing professionally for an average of 9.14 years (*SD* = 8.78), ranging from 3 months to 39 years of professional experience. Descriptive statistics are shown in Table 1.

Table 1. Descriptive Statistics

Sample characteristics	*n*	%
Gender		
male	46	47.9
female	50	52.1
Marital status		
single	37	38.5
in a relationship	23	24.0
married	31	32.3
divorced	4	4.2
widowed	1	1.0
Number of children		
0	72	75.0
1	16	16.7
2	6	6.3
3	2	2.1
Education		
secondary education	13	13.5
vocational training	10	10.4
higher education	73	76.0

Sample characteristics	*Mdn*	*M*	*SD*	*Skewness*	*Kurtosis*	*Min*	*Max*
Age (in years)	27	29.91	8.46	0.96	0.05	19	51
Total dance experience (in years)	20	21.52	8.55	0.70	0.10	6	43
Professional dance experience (in years)	6.5	9.14	8.78	1.34	1.24	0.3	39

Note. *N* = 96.

Measurements

The results presented in this paper are part of a larger research project, which included several questionnaires assessing the psychosocial state of the dancers, as well as questions about their physical condition and injuries. Due to the limited number of eligible participants in the target population and the comprehensive nature of the test battery, which included several questionnaires, special attention was paid to ensuring that the dropout rate was low. To promote a high completion rate, the questionnaire was designed with a uniform appearance, and the questionnaire battery was standardized. Accordingly, all Likert-type items were presented using a 5-point scale (with 1 indicating the lower end and 5 the higher end of the scale). This change was applied to items of the Multidimensional Perfectionism Scale (originally using a 7-point scale), as 5-point scales are believed to result in higher response rates compared to longer versions by reducing respondent frustration (Revilla et al., 2014). Similarly, the Athletic Coping Skills Inventory was adjusted from a 4-point scale to a 5-point scale. Appendix Table 2 presents the original scaling and level names of the questionnaires, as well as those used in the current study. To make the results of this study comparable with those of others, means and standard deviations were also reported according to the original scaling. The following questionnaires were used in this study:

Multidimensional Perfectionism Scale (MPS)

The Multidimensional Perfectionism Scale (MPS) measures self-oriented, other-oriented, and socially prescribed perfectionism (Hewitt & Flett, 1991). It was adapted into Hungarian by Olajos et al. (2021), who studied secondary school and university students (N = 446). Their results were consistent with the normative data provided by the original authors for young adults. Two of its three subscales were used in the present study: self-oriented perfectionism and socially prescribed perfectionism. As the questionnaire battery was extensive and other-oriented perfectionism was beyond the scope of the research project, the third scale was excluded from the battery. The self-oriented subscale included 11 items (e.g., "One of my goals is to be perfect in everything I do"), and the socially prescribed perfectionism subscale included six items (e.g., "My family expects me to be perfect"). Although the original questionnaire was measured using a 7-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7), the current study utilized a 5-point Likert-type scale. While both sum and average item scores are common in the literature, in the present research the scale scores were calculated by averaging. The reliability of the two scales was excellent: for the self-oriented perfectionism scale, Cronbach's α = .90 and McDonald's ω = .90; for the socially prescribed perfectionism scale, α = .81 and ω = .82.

Perceived Stress Scale (PSS)

The perceived stress was measured using the 14-item Perceived Stress Scale (PSS), which is a widely used unidimensional measure to assess the amount of stress in an individual's life over the previous month (Cohen et al., 1983; adapted to Hungarian by Stauder & Konkoly-Thege, 2006). In the present study, items were rated on a 5-point Likert-type scale ranging from never (1) to very often (5), and the scale values were computed by averaging. The reliability of the scale in this study proved excellent (α = .86, ω = .87).

Athlete Burnout Questionnaire (ABQ)

The 15-item Athlete Burnout Questionnaire (ABQ) was developed by Raedeke and Smith (2001) and adapted into Hungarian by Kovács et al. (2020). The questionnaire is used to assess the athlete's attitude towards sports. It is a common practice to modify the items of this questionnaire to match the given sport investigated in the study. In this research, the questions about sports were adapted to refer to dance. For example, the item "I am not achieving much in sport" was changed to "I am not achieving much in dance". The ABQ is organized into three subscales: Reduced sense of accomplishment (5 items; e.g., "I am not performing up to my ability in dance"); Physical and emotional exhaustion, (5 items; e.g., "I feel overly tired from dance"); and Sport devaluation, called "Dance devaluation" in the current study (5 items; e.g., "I am not into dance like I used to be"). Items were rated on a 5-point Likert-type scale ranging from almost never (1) to almost always (5), and the scale values were computed by averaging. The reliability of all three subscales was good: for Reduced sense of accomplishment, α = .77 and ω = .78; for Physical and emotional exhaustion, α = .90 and ω = .90; and for Dance devaluation, α = .84 and ω = .84.

Athletic Coping Skills Inventory (ACSI-28)

The Athletic Coping Skills Inventory (ACSI-28) was developed by Smith et al. (1995) to measure the coping skills of athletes and was adapted to Hungarian by Jelinek (2000). The 28 questions of the original questionnaire are organized into seven subscales, four of which were used in the present research: Concentration (4 items; e.g., "When I'm dancing, I can focus my attention and block out distractions"), Freedom from worry (4 items; e.g., "During performance, I worry about making mistakes or failing to come through"), Confidence and achievement motivation (4 items; e.g., "I get the most out of my talent and skill"), and Coachability (4 items; e.g., "If a coach criticizes or yells at me, I correct the mistake without getting upset about it"). The sport-specific expressions in the questionnaire were adapted for the dance context. Items were rated on a 5-point Likert-type scale ranging from almost never (1) to almost always (5), and the scale values were computed by averaging. The reliability of the Confidence and achievement motivation subscale proved to be inadequate (α = .55 and ω = .59) and was therefore excluded from further analyses. The remaining three subscales showed adequate reliability: for Concentration, α = .74 and ω = .74; for Freedom from worry, α = .78 and ω = .78; and for Coachability, α = .68 and ω = .72.

Data Analysis

After examining the demographic data, descriptive statistics were calculated for the scales used in this study, with an additional focus on the perfectionism subscales. Based on the skewness and kurtosis values, normal distribution could be assumed for the perfectionism subscales (for self-oriented perfectionism, S = -0.39 and K = -0.58; for socially prescribed perfectionism, S = 0.19 and K = -0.82). The skewness and kurtosis values of the other psychological scales used in the analyses also fell within the normal range, with skewness values falling between -0.85 and 0.65 and kurtosis values falling between -0.82 and 0.89.

One-sample *t*-tests were used to examine the deviation of the perfectionism subscales measured in the current sample from the normative values for a community sample provided by the authors of the MPS questionnaire (Hewitt & Flett, 2014). The normative data were reported as the sum of the item values measured on a 7-point Likert-type scale (ranging from 1 to 7) and categorized by age groups, including 18–25 and 26–45 age ranges. In contrast, the current study used the mean scores of 5-point Likert-type scales across all instruments (ranging from 1 to 5). In order to make the normative data comparable with the results of the present study, the following transformations were performed: Firstly, an average score from the total score was calculated by dividing the sum by the number of items. Secondly, the 7-point Likert-type scale was rescaled to a 5-point scale. Equations were used for the conversion of means ((Normative Value – 1) / 6 * 4 + 1) and for the conversion of standard deviations (Normative Value /6 * 4). Lastly, the values of the two age groups relevant to the research were averaged. As a result, normative data (on a 5-point Likert-type scale, based on the mean score) was obtained for self-oriented perfectionism (M = 3.22, SD = 0.16) and for socially prescribed perfectionism (M = 2.51, SD = 0.14). The one-sample *t*-tests were carried out using these values.

Pearson correlation was used to measure the association between the two perfectionism subscales, while Spearman correlation was used to test the correlations between the perfectionism scales and the demographic variables in order to reduce the possibility of demographic biases.

Linear regression was employed to examine how the two perfectionism scales predict perceived stress, burnout, and psychological coping skills. The advantage of regression over correlation is that regression controls for the overlapping effects of the two perfectionism scales, which is particularly important consideration in studies regarding perfectionism, as emphasized by Stoeber (2011). We also examined whether the two perfectionism subscales influence the psychosocial factors independently from each other or whether they moderate each other's effect. This was tested for by introducing an interaction term for the two perfectionism scales to the model: the regression model included the standardized version of the continuous perfectionism scales and the product of the two scales as the interaction term. For visualization purposes, we divided the sample into three groups based on the self-oriented perfectionism scale (low score of self-oriented perfectionism: $Z < -0.5$; medium score: $-0.5 \leq Z \leq 0.5$; and high score: $Z > 0.5$). Simple slopes were displayed for these three groups.

To address concerns about partialing raised by Hill (2014), in addition to regression analyses, we also conducted Pearson correlations between the perfectionism and psychological scales.

All analyses were carried out using JASP 0.18.3.

Results

Perfectionism Levels Among Dancers

In the sample, the mean value of self-oriented perfectionism was 4.02 (SD = 0.67) on the five-point scale, indicating a high degree of self-perfectionism. As the study did not include a control sample (i.e., individuals not engaged in folk dance), comparisons were made to the normative value provided by the original authors of the questionnaire (Hewitt & Flett, 2014), which was 3.22 (after rescaling). Self-oriented perfectionism in the present sample was significantly higher compared to the average population, $t(95) = 11.75$, $p < .001$, Cohen's d = 1.20. The observed difference, exceeding one standard deviation, indicates a large effect and partially supports our first hypothesis. The normative value of socially prescribed perfectionism was 2.51, while the average value of the folk-dance sample examined in this study was 2.46 (SD = 0.88). The value of the sample did not differ significantly from the average population, $t(95) = 0.51$, $p = .609$, Cohen's d = 0.05. As such, the first hypothesis regarding socially prescribed perfectionism was not confirmed.

Association with Demographic Variables

Pearson correlation analysis revealed a significant, weak, positive correlation between the two perfectionism subscales in the sample, $r = .27$ $p = .007$. Additionally, the perfectionism subscales did not show any significant correlation with the demographic and dance-related indicators based on the results of the Spearman correlation analyses (Appendix Table 3), with the exception of a significant, weak, negative relationship between education level and the socially prescribed perfectionism subscale (i.e., those with a higher level of education experienced less socially prescribed perfectionism). None of the objective indicators of the participant's dancing careers (i.e., total dancing experience, professional dancing experience, weekly and daily hours of dance practice, and number of monthly performances) were correlated with the perfectionism subscales.

The Relationship Between Self-Oriented and Socially Prescribed Perfectionism and Psychosocial Variables

To test the association between the two perfectionism subscales and the other psychological variables, linear regression analyses were utilized, including the perfectionism subscales as predictors. To test the interaction between the two subscales, an interaction term was also included as a predictor. As outcome variables, the PSS scale and the subscales of the ACSI-28 and ABQ questionnaires were used. Table 2 contains the results of these moderation analyses.

Table 2. Regression and Moderation Analyses of the Two Perfectionism Subscales

Outcomes	Predictors	*B*	*SE*	β	*p*
PSS - Perceived stress	$F(3, 92) = 10.29$, $p < .001$, $R^2 = 25.1\%$, $\Delta R^2 = 3.5\%$.				
	self-oriented perfectionism	0.01	0.05	.02	.859
	socially prescribed perfectionism	0.26	0.05	.45	**< .001**
	interaction	0.12	0.06	.19	**.042**
ABQ - Dance devaluation	$F(3, 92) = 10.62$, $p < .001$, $R^2 = 25.7\%$, $\Delta R^2 = 0.4\%$.				
	self-oriented perfectionism	-0.42	0.09	-.43	**< .001**
	socially prescribed perfectionism	0.41	0.09	.42	**< .001**
	interaction	-0.07	0.10	-.07	.474
ABQ - Reduced sense of accomplishment	$F(3, 92) = 6.79$, $p < .001$, $R^2 = 18.1\%$, $\Delta R^2 = 0.2\%$.				
	self-oriented perfectionism	-0.12	0.08	-.15	.137
	socially prescribed perfectionism	0.36	0.08	.44	**< .001**
	interaction	-0.03	0.08	-.04	.688
ABQ - Physical and mental exhaustion	$F(3, 92) = 2.82$, $p = .043$, $R^2 = 8.4\%$, $\Delta R^2 = 1.2\%$.				
	self-oriented perfectionism	-0.24	0.11	-.24	**.027**
	socially prescribed perfectionism	0.24	0.11	.23	**.030**
	interaction	-0.13	0.11	-.11	.272
ACSI - Coachability	$F(3, 92) = 6.40$, $p < .001$, $R^2 = 17.3\%$, $\Delta R^2 = 7.1\%$.				
	self-oriented perfectionism	0.22	0.08	.27	**.008**
	socially prescribed perfectionism	-0.24	0.08	-.30	**.003**
	interaction	0.24	0.08	.27	**.006**
ACSI - Concentration	$F(3, 92) = 6.00$, $p < .001$, $R^2 = 16.4\%$, $\Delta R^2 = 2.3\%$.				
	self-oriented perfectionism	0.23	0.07	.33	**.002**
	socially prescribed perfectionism	-0.22	0.07	-.32	**.002**
	interaction	0.12	0.07	.15	.099
ACSI – Freedom from worry	$F(3, 92) = 6.34$, $p < .001$, $R^2 = 17.1\%$, $\Delta R^2 = 1.0\%$.				
	self-oriented perfectionism	0.12	0.10	.12	.223
	socially prescribed perfectionism	-0.42	0.10	-.42	**< .001**
	interaction	0.11	0.10	.10	.296

Note. $N = 96$. R^2 represents the total explained variance in the model, while ΔR^2 represents the part of variance due to the moderation. Bold font indicates statistical significance at $p < .05$.
PSS = Perceived Stress Scale, ABQ = Athlete Burnout Questionnaire, ACSI = Athletic Coping Skills Inventory.

To ensure that partialing did not fundamentally change the correlations of the perfectionism scales and the psychological factors, a Pearson correlations analysis was also conducted between the scales. The results are included in Appendix Table 4. The overall pattern of the results did not change; the only notable difference was that the correlations in the bivariate analyses were slightly weaker compared to the regression results.

Perfectionism and Perceived Stress

In the case of perceived stress, the two perfectionism subscales and the interaction term explained 25.1% of the variance. Of this, the interaction term was responsible for 3.5%. Socially prescribed perfectionism had a positive, moderate effect on stress, while the effect of self-oriented perfectionism was not significant. Our second and third hypotheses were therefore partially confirmed with regard to perceived stress. The interaction term was significant (i.e., the effect of the two perfectionism subscales on perceived stress was not independent, but they also moderated each other's effect). The nature of this moderation can be interpreted using Figure 1A, which shows that the positive effect of socially prescribed perfectionism on stress was the steepest in the case of high self-oriented perfectionism. Perceived stress was lowest when high self-oriented perfectionism combined with low levels of socially prescribed perfectionism. However, in the presence of severe socially prescribed perfectionism, self-oriented perfectionism aggravated its effect, resulting in the highest levels of perceived stress in such individuals.

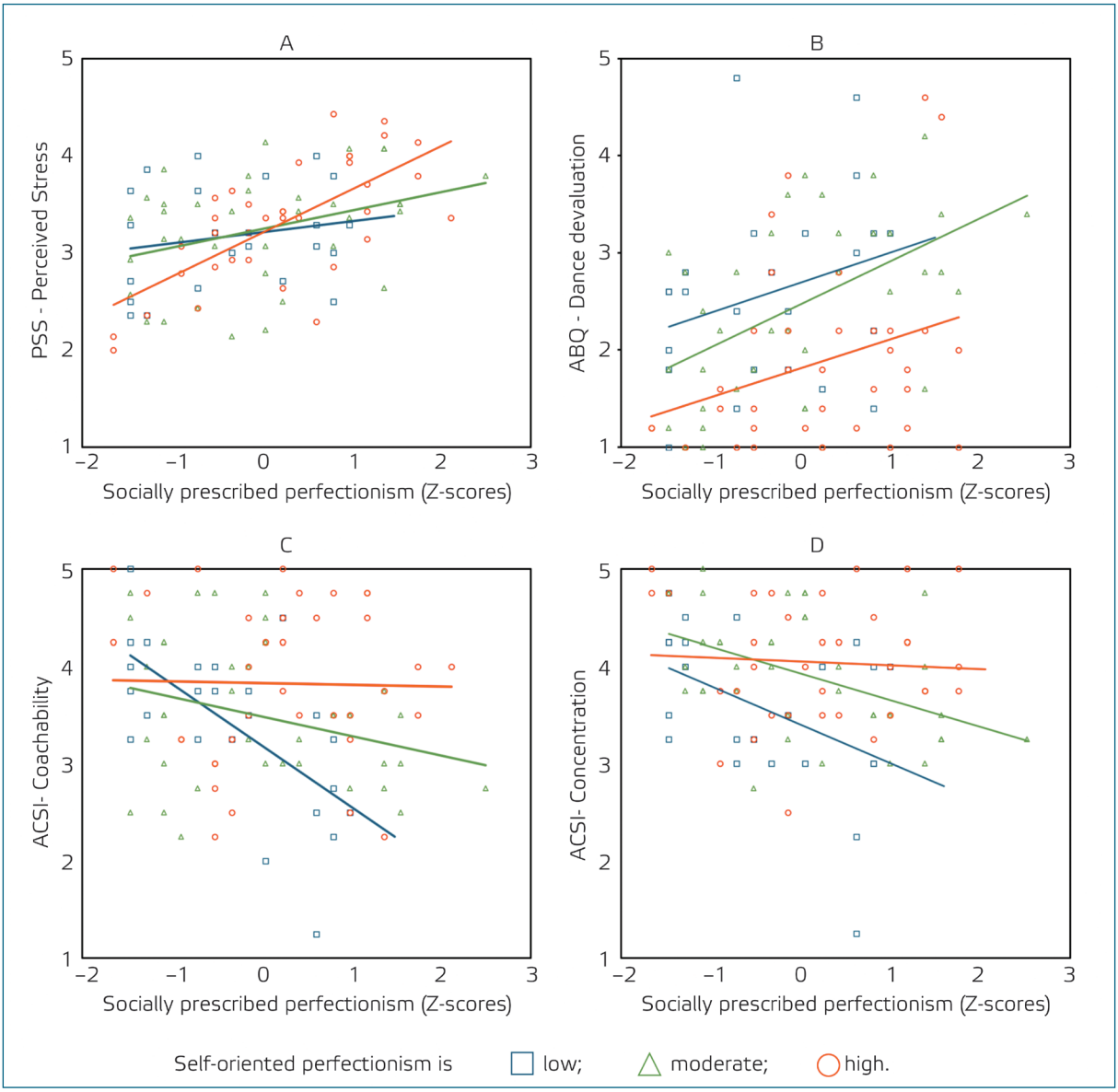
Perfectionism and Burnout

In the case of the burnout scales, socially prescribed perfectionism showed a positive association with a reduced sense of accomplishment, physical and mental exhaustion, and devaluation of dance. In contrast, self-oriented perfectionism did not significantly predict a reduced sense of accomplishment, and it showed a negative association with physical and mental exhaustion as well as devaluation of dance (meaning those with high levels of self-oriented perfectionism rated dance more highly). Thus, our second and third hypotheses were also only partially confirmed with regard to burnout. The interaction term was not significant for predicting any of the burnout subscales. Overall, the two subscales had independent effects on dance devaluation: socially prescribed perfectionism aggravated it, while self-oriented perfectionism reduced it (Figure 1B). To a lesser extent, similar relationships can be seen in the case of Physical and mental exhaustion. In the case of the reduced sense of accomplishment scale, the effect of socially prescribed perfectionism was significant, but the effect of the self-oriented scale and the interaction term were not.

Perfectionism and Coping Skills

The two perfectionism subscales were associated with dance-related coping skills in fundamentally different ways. While high levels of self-oriented perfectionism were associated with significantly higher concentration ability and marginally higher coachability, socially prescribed perfectionism was associated with lower concentration ability and coachability as well as increased dance-related worry. With regard to coping skills, our second and third hypotheses were confirmed, with the exception of the freedom from worry subscale, which was only partially confirmed. Regarding coachability, both perfectionism subscales and their interaction term had a significant effect. The total explained variance was 17.3%, with the interaction term accounting for 7.1%. Figure 1C shows that with low levels of socially prescribed perfectionism were linked with high levels of coachability; however, as this type of perfectionism increased, coachability declined. Self-oriented perfectionism mitigated this negative impact and could even nullify it if sufficiently high. A similar pattern was observed with the concentration scale (Figure 1D), though the interaction term was only marginally significant in this case. For the freedom from worry subscale, only the effect of the socially prescribed perfectionism scale was significant.

Figure 1. Interaction Between the Perfectionism Subscales



Note. $N = 96$. For the self-oriented perfectionism scale, low indicates a value smaller than $Z = -0.5$, moderate indicates a value between -0.5 and 0.5, and high indicates a value greater than $Z = 0.5$.
PSS = Perceived Stress Scale, ABQ = Athlete Burnout Questionnaire, ACSI = Athletic Coping Skills Inventory.

Discussion

According to the biopsychosocial model, health also encompasses an individual's psychological well-being (Moravcsik-Kornyiczki & R. Fedor, 2021). In light of this, as part of our larger research project, the present study examined the factors influencing the mental health of dancers. To date, there are only a few studies on the mental states of Hungarian folk dancers (Medveczné Atinay et al., 2022; Szászi & Szabó, 2021). Therefore, in this study, multidimensional perfectionism among Hungarian professional folk dancers was investigated along with certain psychological factors associated to it. Consistently high physical and mental demands are placed on dancers during rehearsals and performances. Moreover, this load is not seasonal (such as the competitive season for athletes), as dancers must perform at a high level all year round (Koutedakis, 2000; Twitchett et al., 2010). The pressure to meet the high expectations set by themselves or others can easily drive dancers into perfectionism, which can become embedded in the everyday life of dance artists (Hill et al., 2020; Nordin-Bates et al., 2016, 2017).

It is often suggested that dancers tend to strive for perfection (Nordin-Bates et al., 2011). Our initial hypothesis (H1) that the dancer group would exhibit higher levels of perfectionism compared to the general population has been partially confirmed. The prevalence of self-oriented perfectionism, as measured by Hewitt and Flett's (1991) multidimensional model, was higher among dancers compared to the general population, but the degree of socially prescribed perfectionism among dancers did not differ from the general population. The lack of deviation from the average population was surprising and inconsistent with the literature, which suggests that dancers are subject to high expectations and that their socially prescribed perfectionism is reinforced by the expectations of others, especially from art directors (Nordin-Bates, 2014).

The regression analyses examining the association between the psychosocial factors and the two subscales of perfectionism (H2 and H3) suggest that, among folk dancers, socially prescribed perfectionism is more closely related to psychological dysfunctions, thereby supporting the multidimensional conceptualization of perfectionism (Molnar et al., 2006; Stoeber et al., 2009). Since the two types of perfectionism are often observed together in dancers (Nordin-Bates, 2014), we also investigated whether self-oriented and socially prescribed perfectionism influence each other's effects. Using moderation analyses, we also sought to answer the question as to whether self-oriented perfectionism is able to moderate the adverse psychological effects induced by socially prescribed perfectionism or, on the contrary, amplify them. Our results showed a mixed picture.

Our findings show that the stress perceived by dancers was affected differently by the two types of perfectionism. While self-oriented perfectionism did not significantly increase perceived stress, socially prescribed perfectionism was associated with higher levels of stress. This is entirely consistent with the results of previous studies (Dunkley et al., 2000, 2003; Shafique et al., 2017; Smith et al., 2017; Tashman et al., 2010). However, the moderation analysis revealed a complex interaction between the two perfectionism scales and added a more nuanced understanding of self-oriented perfectionism. Perceived stress was lowest when low socially prescribed perfectionism combined with high self-oriented perfectionism; that is, when dancers are not worried about external expectations, self-oriented perfectionism may indeed be a kind of adaptive striving, aiding them and protecting them against stress. This configuration might be the most ideal attitude in resisting perceived stress. In contrast, the highest levels of perceived stress are expected when high levels of socially prescribed perfectionism are accompanied by high self-oriented perfectionism. In this case, the combined effect of the two subscales increases perceived stress, demonstrating the dual nature of self-oriented perfectionism. The literature has associated the self-oriented aspect of perfectionism with positive outcomes, which are thought to be adaptive and associated with perfectionistic strivings. In contrast, our current study showed that although it is indeed positive in most cases, it can also aggravate the damaging effects of socially prescribed perfectionism. This result is consistent with the observation that self-oriented perfectionism increases feelings of shame and guilt in the event of failure (Stoeber et al., 2008). That is, although self-oriented perfectionism is generally associated with positive outcomes, in the presence of certain negative factors such as an event of failure, according to Stoeber et al. (2008), or in the case of the present study high socially prescribed perfectionisms, it can also have negative outcomes. The result also resonates with Hill and Hall's (2012) warning that personal strivings can also have a detrimental effect, as it is characterized by obsession with perfect performance, mistake avoidance, and harmful rumination.

Elite athletes and performing artists, including dancers, are highly prone to burnout, given the high physical and mental load they face throughout the year and the fewer opportunities for recovery (Gustafsson et al., 2008; Hall & Hill, 2012; Koutedakis, 2000). Our results show that higher levels of self-oriented perfectionism are inversely related to burnout, (i.e., the higher the level of self-oriented perfectionism, the more the dancer values dance, finds pleasure in dance, and feels motivated. They do not judge their own performance negatively and do not report physical or emotional exhaustion. In contrast, dancers with a high level of socially prescribed perfectionism show strong signs of burnout: they evaluate their performance more negatively, report physical and emotional exhaustion, feel that they are not good enough, and experience a consequent decrease in interest and motivation to dance. These results are consistent with previous studies on burnout associated with maladaptive forms of perfectionism (Cumming & Duda, 2012; Gustafsson et al., 2008; Hill & Curran, 2015; Jowett et al., 2016; Rice & Liu, 2020; Yang et al., 2023), but it is partly inconsistent with Hall and Hill (2012), who stated that in addition to perfectionistic concerns, personal strivings are also positively associated with burnout. In the moderation analysis, we found no significant interaction between the two perfectionisms, meaning that they independently affect dancer burnout; moreover, the presence of self-oriented perfectionism does not modify the negative effect of socially prescribed perfectionism, neither reducing nor increasing it.

Given that dance is a high-stress activity, making the dancer vulnerable to injury (Deu, 2020; Koutedakis, 2000), where even the slightest mistake can result in serious injury, it is necessary for the dancer to be in the

right mental state to perform in rehearsals, training, and performance, in addition to being physically fit. A high level of concentration, freedom of movement without anxiety, and the acceptance of the leader's direction (i.e., coachability) are essential for safe preparation and successful performances (Giacobbi, 2000). To investigate this attitude, we adapted the Athlete Coping Questionnaire (Smith et al., 1995) from the field of sport, as we found it suitable for measuring dancers' attitudes with modifications to the instrument text.

The regression analyses revealed a strong difference between the two types of perfectionism. In the case of self-oriented perfectionism, we see a positive and significant association with concentration (i.e., the higher the level of perfectionism, the more the dancer can focus their attention on the task). In contrast, the same factor is the opposite in the case of socially prescribed perfectionism, where higher levels of perfectionism are associated with lower concentration. These results are consistent with the findings of Arslan and Altan-Atalay (2023). Similarly, association with coachability differs between the two subscales: a higher level of socially prescribed perfectionism is linked to lower coachability, leading to demonstrably weaker cooperation with leaders. Performance anxiety was also observed in the same dancers, whereas no evidence of this was found in the case of self-oriented perfectionism. Thus, dancers who hold high expectations of themselves and do not overestimate what others expect of them exhibit lower anxiety in their company as well as greater concentration and smoother cooperation with their leader. Our results support research showing that adaptive perfectionism has a positive relationship with behavioral and cognitive engagement in task performance, in contrast to maladaptive perfectionism (Arslan & Altan-Atalay, 2023). As we found that maladaptive perfectionism is associated with higher perceived stress, in line with previous literature, our finding that maladaptive perfectionism is associated with poorer coachability is in line with Brown (2024), who found a negative correlation between perceived stress and coachability in athletes.

This observation is further nuanced by the moderation analyses. In the case of coachability, an interaction was found between the effects of socially prescribed and self-oriented perfectionism: high self-oriented perfectionism was shown to function as a protective factor, as it can reduce the adverse effect of socially prescribed perfectionism on coachability. Although no moderation studies on coachability have been found in the literature, LoCicero et al. (2000) reported that students with healthy perfectionism (high standards but low discrepancy) had higher willingness to cooperate with others compared to those with unhealthy perfectionism (high standards but high discrepancy) or who were not perfectionists. Parker (1997) reported higher agreeableness and conscientiousness, while Rice and Dellwo (2002) reported higher social integration among healthy perfectionists. Both studies suggest that the adaptive form of perfectionism is associated with better social outcomes, but these may be masked by negative aspects of perfectionism. The present study reached similar but not entirely identical results. Based on the present study, in the case of coachability, self-oriented perfectionism is able to maintain its positive effect even in the presence of high levels of socially prescribed perfectionism and may even function as a kind of buffer.

A similar, albeit weaker moderating effect was observed for concentration. In this case, the interaction between the two perfectionism scales was only marginally significant. For both coachability and concentration, the highest levels are observed when a dancer's socially prescribed perfectionism is low. In such cases, self-oriented perfectionism does not confer any additional positive effect on these traits. However, as socially prescribed perfectionism increases, both concentration and coachability decline. This negative impact, however, can be mitigated by self-oriented perfectionism. While similar studies are rare in the literature, Periasamy and Ashby (2002) found that individuals classified as healthy perfectionists have a more internal locus of control, and according to Rice et al. (2003), they exhibit greater personal control.

The moderation analyses presented in the present study contribute to the body of research examining the interaction between different aspects of perfectionism. On the one hand, the study applies Hewitt and Flett's (1991) model, which has not been previously reported in the literature; on the other hand, it also provides examples of two possible forms of moderation, highlighting that the impact that perfectionism dimensions have on each other depends on the domain under investigation. For example, the buffering role of self-oriented perfectionism against socially prescribed perfectionism in the case of concentration and coachability aligns well with research that found a similar buffering effect of the positive aspects of perfectionism in relation to academic self-determination, academic satisfaction, and general positive and negative affects (Gaudreau & Thompson, 2010) as well as cynicism (Rice & Liu, 2020). However, this contradicts Stoeber's (2011) review, according to which perfectionistic concerns suppress the positive effect of strivings. In contrast, in the case of perceived stress, another type of moderation effect was demonstrated: self-oriented perfectionism and socially prescribed perfectionism not only counteract each other, weakening each other's effect, but in certain cases can also exacerbate each other's effect. This is evidenced by the finding that the highest level of perceived stress was detected for dancers characterized by both high self-oriented and high socially prescribed perfectionism.

In summary, the results of our research highlight the psychological vulnerability of Hungarian folk dancers, since, as predicted from the literature, they were characterized by a high level of self-oriented perfectionism (Hill et al., 2020; Nordin-Bates et al., 2011). Self-oriented perfectionism can be considered a more adaptive form of perfectionism; this was also confirmed by the results of the present study, where it was found to be less associated with negative psychological outcomes. On the other hand, the present study also highlighted the negative side of self-oriented perfectionism, which in certain cases can strengthen the negative effect of socially prescribed perfectionism. In addition, the present study also confirmed the association between socially prescribed perfectionism and negative psychological outcomes such as higher perceived stress, burnout, and worry as well as lower concentration and coachability. This underscores the importance of developing measures to support the mental health of dancers and the teaching of self-care techniques.

Strenghts and Limitations

Only a few studies in the Hungarian literature have focused on the psychological states of Hungarian folk dancers (Medveczné Atinay et al., 2022; Szászi & Szabó, 2021). Notably, none of these studies deal with the construct examined in the present study and its relationship to certain psychological factors, which we consider to be one of the strengths of our research. Our findings provide useful insights for artists who aim to preserve Hungarian folk traditions, particularly for designing future interventions to support artists' mental well-being.

Another strength of the present study is its complex analysis of psychosocial factors and their interactions. In particular, the investigation of the relationship between coachability and perfectionism as well as the moderating effect of co-existent self-oriented and socially prescribed perfectionism represent novel contributions to the literature.

One limitation of this research was the size of the studied population. Given the fact that there are only four major professional folk dance companies operating in Hungary, the number of participants for the research was also limited. Of the approximately 140 professional dancers, 96 were included in the study. Although this represents 70% of the total population studied, the low sample size may have affected the reliability of some of the statistical results and resulted in weaker statistical power.

Due to the limited population size, special attention was paid to designing the questionnaire battery in such a way as to minimize the dropout rate. One method to achieve this was to standardize all items in the questionnaires to a 5-point Likert-type scale, as this format has been shown to result in the highest completion rate (Revilla et al., 2014). However, this conversion makes it difficult to compare our results with those of other studies due to the different scaling formats. To address this issue, we also reported the means and standard deviations converted to the 7-point scale in Appendix Table 1.

Conclusion, Implications, and Future Directions

Perfectionism is a commonly observed personality trait among performing artists, including dancers, which as a multidimensional construct can support or hinder a dancer in achieving better performance and sustaining a meaningful, long career. In this study, we sought examine how different aspects of perfectionism relate to dancers' psychological states. Our results, harmonizing with previous research, show that socially prescribed perfectionism, which stems from the expectation to conform to others, is negatively associated with dancers' mental state (e.g., higher levels of stress and burnout), which may potentially increase dancers' mental or physical vulnerability. In contrast, self-oriented perfectionism is essentially adaptive, functioning as a supportive factor. Our results highlight the dual nature of self-oriented perfectionism, which was shown to moderate the effect of socially prescribed perfectionism in a complex manner. In regard to coachability and concentration, it can reduce the damaging effect of socially prescribed perfectionism; however, it can also aggravate the negative effects of stress. As maladaptive forms of perfectionism can be a threat to a dancer's mental health, it is important to help dance artists to recognize and overcome it. To do this, they can benefit from psychological support and tools to help them develop better coping strategies and to manage their high expectations of themselves and their performance in a constructive way. It would be ideal to introduce them to these tools during their studies.

Further research should be conducted on the relationship between perfectionism and other psychological factors, including possible mediational models. Furthermore, the correlation between perfectionism and injury would also be worth investigating from a prevention perspective.

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Author contribution
Csilla ALMÁSY: conceptualization, design, investigation, project administration, data management, formal analysis, interpretation, writing original draft, writing review and editing.
Klára SOLTÉSZ-VÁRHELYI: conceptualization, design, methodology, data management, formal analysis, interpretation, writing original draft, writing review and editing.
Anita R. FEDOR: conceptualization, design, supervision, writing original draft.

Declaration of interest statement
The authors have no conflicts of interest to disclose.

Ethical statement
This manuscript is the authors' original work.
All participants engaged in the research voluntarily and anonymously.
Their data are stored in coded materials and databases without personal data.
The studies involving human participants were reviewed and approved by Nemzeti Népegészségügyi és Gyógyszerészeti Központ Klinikai Kutatások Főosztály. The ethical permission number is TUKEB BM/819-1/2024.

Data availability statement
No datasets were presented in this article.

Declaration on using artificial intelligence in research and manuscript preparation
The authors have not used AI technologies in our research or the preparation of this manuscript.

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Appendix

Appendix Table 1. Number of Professional Hungarian Folk Dancers in 2025

Dance company	Number of dancers
Fitos Dezső Társulat[a]	16
Duna Művészegyüttes[b]	31
Magyar Nemzeti Táncegyüttes[c]	44
Magyar Állami Népi Együttes[d]	40

Notes. Information on the number of dancers was collected from the dance companies' websites in May 2025.
[a]https://fitosdezsotarsulat.hu/rolunk/ [b]https://dunamuveszegyuttes.hu/tarsulat/
[c]https://mnte.hu/hu/tancegyuttes/ [d]https://hagyomanyokhaza.hu/hu/mane/tarsulat

Appendix Table 2. Scaling, Means, and Standard Deviations Calculated Based on the Original Scaling of the Questionnaires and Based on the 1 to 5-Point Scaling Utilized in the Current Study

	Original scaling			Scaling utilized in this study		
Characteristics	Range of scale	*M*	*SD*	Range of scale	*M*	*SD*
MPS - Self-oriented perfectionism	1 to 7	5.53	1.01	1 to 5	4.02	0.67
MPS - Socially prescribed perfectionism	1 to 7	3.19	1.32	1 to 5	2.46	0.88
PSS - Perceived stress	0 to 4	2.25	0.57	1 to 5	3.25	0.57
ABQ - Reduced s. of accomp.	1 to 5	2.23	0.81	1 to 5	2.23	0.81
ABQ - Phys./emot. exhaustion	1 to 5	2.43	1.03	1 to 5	2.43	1.03
ABQ - Dance devaluation	1 to 5	2.28	0.97	1 to 5	2.28	0.97
ACSI - Coachability	1 to 4	2.94	0.61	1 to 5	3.59	0.81
ACSI - Concentration	1 to 4	3.15	0.53	1 to 5	3.87	0.70
ACSI - Freedom from worry	1 to 4	2.53	0.74	1 to 5	3.04	0.99
Questionnaires	Original scaling			Scaling utilized in this study		
MPS	The original English version only names 1 = Strongly disagree; 4 = Neutral or undecided; 7 = Strongly agree. The Hungarian version names all levels; 1 = Entirely not true; 2 = Mostly not true; 3 = Somewhat not true; 4 = I don't know; 5 = Somewhat true; 6 = Mostly true; 7 = Entirely true.			Two endpoints named: 1 = Strongly disagree; 5 = Strongly agree.		
PSS	0 = Never; 1 = Almost never; 2 = Sometimes; 3 = Fairly often; 4 = Very often.			1 = Never; 5 = Very often.		
ABQ	1 = Almost never; 2 = Rarely; 3 = Sometimes; 4 = Frequently; 5 = Almost always.			1 = Almost never; 5 = Almost always.		
ACSI	1 = Almost never; 2 = Rarely; 3 = Often; 4 = Almost always.			1 = Almost never; 5 = Almost always.		

Notes. MPS = Multidimensional Perfectionism Scale, PPS = Perceived Stress Scale, ABQ = Athlete Burnout Questionnaire, ACSI = Athletic Coping Skills Inventory.

Appendix Table 3. Spearman Correlations Between Perfectionism Subscales and Demographic and Dance Career Indicators

		Self-oriented perfectionism		Socially prescribed perfectionism	
Sample characteristics		*r*	*p*	*r*	*p*
Demographic indicators	Age	.03	.754	.01	.925
	Gender[a]	.11	.279	.02	.881
	Education level	-.04	.702	-.25	**.013**
	Number of children	.03	.791	-.07	.474
Dance carrier indicators	Total dance experience	.12	.265	-.02	.859
	Professional dance experience	.03	.774	-.05	.637
	Weekly dance practices	-.04	.727	-.15	.143
	Daily dance practices	.13	.203	-.04	.669
	Monthly performances	.15	.155	-.13	.193

Notes. $N = 96$. [a]Male = 1, Female = 2. Bold font indicates statistical significance at $p < .05$.

Appendix Table 4. Pearson Correlations Between Perfectionism Subscales and the Psychological Scales

	Self-oriented perfectionism		Socially prescribed perfectionism	
Psychological scales	*r*	*p*	*r*	*p*
PSS - Perceived stress	.13	.108	.47	**< .001**
ABQ - Dance devaluation	-.31	**.001**	.30	**.002**
ABQ - Reduced sense of accomplishment	-.02	.410	.40	**< .001**
ABQ - Physical and mental exhaustion	-.16	.057	.16	.058
ACSI - Coachability	.17	**.049**	-.21	**.018**
ACSI - Concentration	.23	**.014**	-.23	**.014**
ACSI - Freedom from worry	<.01	.491	.39	< .001

Notes. $N = 96$. Bold font indicates statistical significance at $p < .05$.
PSS = Perceived Stress Scale, ABQ = Athlete Burnout Questionnaire, ACSI = Athletic Coping Skills Inventory.

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