Burnout, Resilience and Needs Satisfaction: Exploring the Associations in Basketball Athletes

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Article

Burnout, Resilience and Needs Satisfaction: Exploring the Associations in Basketball Athletes

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Abstract: The aim of this study is to explore the degree to which basketball players might be shielded from burnout by their psychological resilience. The investigation assessed the resilience, physical and mental burnout, reduced sense of accomplishment, and depreciation of sport among athletes. The results indicated that reduced levels of burnout elements were associated with increased resilience, highlighting the importance of resilience in supporting athletes' well-being. The findings suggest that maintaining intrinsic motivation and avoiding burnout are contingent upon the fulfilment of essential psychological needs. Resilience and fatigue levels differed based on age, gender, and competition level, highlighting the necessity for tailored therapy. The findings indicate that specific interventions, including psychological training and enhancing social support systems, could enhance resilience and reduce burnout, ultimately promoting a more sustainable and healthier sporting atmosphere. The findings highlight the connection between resilience, psychological needs, and burnout, thereby enhancing existing theoretical frameworks and offering crucial guidance for sports organizations and coaches focused on enhancing athlete well-being.

Keywords: resilience; burnout; basketball athletes; psychological needs; social support; individualized interventions

1. Introduction

Burnout in sports constitutes a psychological syndrome characterized by extended reactions to chronic stress and emotional exhaustion. Gustafsson et al. [1] point out that burnout is a phenomenon that can affect athletes, and it is connected to numerous negative implications, including a fall in performance, less enjoyment, the rise of depressive sentiments, and possibly withdrawing from sports altogether. Raedeke et al. [2] characterize burnout as a complex syndrome that encompasses both emotional and physical fatigue, a reduced sense of achievement, and a diminished valuation of the sport itself. A significant characteristic noted is that a diminished sense of athletic accomplishment is reflected in a perception of low ability concerning performance and sport skill level. This may result in feelings of inadequacy and failure. As articulated by Gustafsson et al. [1], the final element reveals that the devaluation of sport manifests as a diminished motivation, wherein the athlete experiences a waning enthusiasm for an activity they once cherished. This phenomenon frequently arises as a reaction to persistent stress. Raedeke and Smith [3] posit that burnout entails an evaluative process in which athletes assess their capacity to manage the ongoing demands of their sport, resulting in disengagement. The consequences of burnout transcend the realm of sports, resulting in psychological issues including depression and anxiety. Gustafsson et al. [1] state that burnout is related to impaired psychological well-being and physical health. Cohn [4] concludes also that burnout leads to behavioral reactions stemming from chronic stress, which encompass rigid behaviour, decreased performance, interpersonal difficulties, and ultimately withdrawal from sport.

Mental resilience is widely acknowledged as a crucial factor in surmounting adversity and maintaining psychological well-being. Fletcher and Sarkar [5] define resilience as the capacity to use personal attributes to endure stress. Resilience encompasses a range of internal and external elements that empower individuals to adapt successfully to stressful or demanding circumstances. According to Morano et al. [6] resilience is closely associated with the satisfaction of essential psychological

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requirements. Poulus et al. [7] assert that mental toughness is correlated with elevated levels of resilience, especially in complex environments. This association illustrates that resilience encompasses not just enduring adversity but also thriving and excelling in challenging circumstances. A crucial aspect of resilience is social support, which Dimmock et al. [8] assert, fulfils the demand for relatedness via pleasant social interactions in several ways.

To maintain motivation and health, athletes must have their essential psychological needs fulfilled. Self-determination theory identifies three fundamental psychological requirements: autonomy, competence, and relatedness [9]. According to López-Walle et al. [10], autonomy is characterized as the essential need to experience agency over one's behaviors, which subsequently fosters a heightened sense of ownership concerning one's choices. In order to sustain intrinsic motivation, which supports sustained dedication and performance, these demands must be met. Coaches that encourage athletes' autonomy are more likely to improve their players' well-being and intrinsic motivation in sports [11]. Competence is achieved when athletes perceive themselves as capable and successful in acquiring skills and attaining goals [12]. Competence represents a significant attribute. Consequently, enhanced outcomes are attained when opportunities for skill development and consistent feedback are available. Lourenço et al. [13] confidently state that the perception of competence is a crucial predictor of perceived performance in athletes, which subsequently boosts their motivation to engage in the sport.

Furthermore, athletes who feel supported by their teammates and coaches experience greater satisfaction and perform better [14]. Athletes who experience a sense of community connection demonstrate enhanced capacity to manage pressure and adversity. Bartholomew et al. [15] assert that ensuring relatedness in team sports fosters cohesion and strengthens mental resilience. Westerskov Dalgas et al. [16] suggest that a positive and autonomy-supportive coaching approach can enhance athletes' intrinsic motivation and well-being, thereby facilitating the fulfilment of their psychological needs. This can subsequently reduce these hazards. Li et al. [17] also underscore the critical role of fulfilling basic psychological needs in the cultivation of mental toughness, which equips athletes to adeptly manage adversities. The development of resilience is of paramount importance for adolescent athletes [18].

The relationship between burnout and resilience in athletes is significantly affected by the satisfaction of essential psychological demands. Li et al. [19] define resilience as the capacity to react constructively to adverse situations, a proficiency that is augmented when athletes recognize their autonomy and competence within their sport. Furthermore, Gustafsson et al. [1] assert that the fulfillment of psychological needs is critical in mitigating the symptoms of burnout and bolstering mental resilience within the context of competitive sports. Autonomy support enhances athletes' feelings of empowerment and control, serving as a protective factor against the emotional exhaustion linked to burnout [20]. Fletcher and Sarkar [5] emphasise that relatedness, or the need for connection, fosters an environment in which athletes exhibit greater resilience to stress. Psychological need satisfaction in sports mitigates burnout and facilitates resilience, creating a dynamic relationship in which resilience serves a protective role against burnout when needs are met.

Athlete burnout is a complex phenomenon shaped by numerous psychological factors, especially mental resilience and the fulfilment of fundamental psychological needs. Poulus et al. [7] indicate that increased mental resilience and toughness correlate with reduced burnout levels in athletes. This finding highlights the importance of resilience as a protective factor against the adverse effects of stress and burnout in high-performance sports. Higher resilience and toughness athletes show lower degrees of impaired sense of achievement, physical tiredness, and unfavorable opinions towards their sport [21]. The application of this framework to basketball athletes demonstrates that resilience serves as a significant asset, enabling them to manage the distinct pressures inherent in competitive sports, like basketball. Raedeke and Smith [3] investigated the stress-mediated and moderation hypotheses concerning coping resources and athlete burnout. Stress and burnout can be lessened by having access to coping tools like social support and effective stress management strategies. This shows how important resilience is in an athlete's coping strategy [22].

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Meeting the basic psychological needs of players is linked to keeping them from getting burned out and building their mental toughness [23]. Lemyre et al. [24] found that variability in motivation and affect can increase elite athletes' susceptibility to burnout, while those with resilience are better able to endure the pressures of high-performance sports. Morales-Sánchez et al. [25] further assert that addressing athletes' requirements for autonomy, competence, and social connection augments intrinsic motivation while simultaneously mitigating the incidence of burnout. In contrast, it is noted that a controlling interpersonal coaching style and the thwarting of basic psychological needs can elevate the risk of burnout in adolescent basketball players. This demonstrates the significance of coaches in creating an environment that addresses athletes' essential psychological needs, thereby improving their resilience and mitigating burnout [23].

Coaching behaviors confound the relationship between burnout, need satisfaction, and resilience. Keatlholetswe and Malete [26] assert that "coaching efficacy" and "players' perceptions of coaches' leadership styles" both have a substantial impact on a team's performance. An empowered and autonomy-supportive leadership style is more likely to prevent athletes from experiencing burnout in an environment that promotes resilience and provides for basic needs [27]. According to Shannon et al. [28], athletes are adept at recognizing when their well-being is being negatively affected by controlling coaching tactics, such demanding and dictatorial attitudes. Athletes may develop resilience in a nurturing atmosphere fostered by coaches who put their mental health first. By boosting self-efficacy and addressing fundamental psychological needs, exercise promotes resilience in teenagers. Li et al. [19] discerned a comparable pattern. The resilience of an athlete is augmented through the intermediary role of self-efficacy, which cultivates a perception of competence and autonomy. This implies that the most effective method of addressing athlete burnout may be a comprehensive strategy that integrates the development of resilience at the individual level with the establishment of a supportive environment [29].

The claim made by Li et al. [19] is that resilience and meeting basic psychological needs are connected. Sports groups, educators, and players must thus work together to create a culture that encourages resilience. According to Morales-Sánchez et al. [25], supportive coaching methodologies are notably more effective in addressing the fundamental psychological needs of basketball athletes. As a result, athletes encounter decreased weariness. This trend clearly indicates that coaching practices may considerably impact players' mental well-being [30]. It is imperative for coaches to recognize their impact on the psychological requirements of their athletes, as authoritarian pedagogical strategies may result in increased levels of anxiety and burnout among sports athletes [28].

In summary, the majority of research suggests that comprehending and conceptualizing athlete burnout requires resilience and the satisfaction of athletes' basic psychological needs. To reduce the detrimental effects of burnout and improve athletes' long-term performance and well-being, coaches and sports organizations must prioritize the development of need-supportive environments and resilience-boosting strategies [7]. Lemyre et al. [24] demonstrate that the fulfilment of athletes' fundamental psychological needs—autonomy, competence, and relatedness—enhances their motivation and well-being. Shannon et al. [28] also assert that coaches are essential in addressing athletes' psychological needs to mitigate burnout symptoms. In this regard, Raedeke & Smith [3] point out that therapies meant to lessen burnout may be informed by recognizing the protective characteristics that lead to resilience, such as social support and efficient coping mechanisms. Additionally, as Raedeke and Smith [3] succinctly put it, knowing how these factors interact might help reduce athlete burnout. Therefore, we can more effectively treat athlete burnout and advance their general well-being by highlighting the significance of need fulfilment and mental resilience.

Burnout is a condition that develops in reaction to ongoing interpersonal pressures [31]. These repercussions, which significantly affect a basketball athlete's performance and overall health, present as fatigue, irritability, and reduced drive. According to Tabei et al. [32] athlete burnout may be precipitated by organizational stresses, including a dearth of support, inadequate communication, and elevated expectations. The character of the coach-athlete relationship significantly impacts this situation [33]. The efficacy of the coach-athlete working alliance has a significant impact on the

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resilience and perceived stress of athletes [34]. Developing a respectful and open relationship between instructors and athletes can help reduce stress levels. Moen et al. [35] emphasise that a robust working relationship between the coach and the athlete greatly improves the athlete's resilience, consequently decreasing the chances of exhaustion. This underscores the importance for coaches to develop a deep understanding of their athletes. Furthermore, persistence is a vital strategy in combating burnout [36].

Burnout in basketball environment is often caused by organizational stress. According to Bartholomew et al. [37], athletes' basic psychological requirements are impacted by organizational pressures, and the athletes' evaluation of these stressors may act as a mediator in the burnout process. Athletes may have heightened burnout when they see their environment as demanding and unmanageable. Athletes using active coping mechanisms, such as seeking assistance and confronting obstacles, have a reduced susceptibility to burnout, according to Raedeke and Smith [3]. Instructing athletes in effective coping mechanisms mitigates burnout and fosters resilience. A supporting team may help to enhance mental health. Tabei et al. [32] claim that helpful peer interactions and a feeling of belonging may help to lower the negative consequences of stress. Athlete mental health results are much influenced by encouraging colleagues to help one other. To sum up, certain elements stop sports burnout even as they increase performance and mental health. Important elements include psychological resilience, good coach-athlete connections, organizational support, efficient coping strategies, and a motivating basketball team atmosphere [38,39]. By tackling these challenges, sports teams and coaches might create a compassionate environment that supports resilience and lowers burnout, therefore enhancing the general performance and welfare of the basketball athletes [40]. This study aims to examine the correlations among sports burnout, resilience, and need satisfaction in basketball athletes. The study examines basketball players to assess the impact of resilience and fundamental psychological need fulfilment on burnout levels. The research aims to elucidate the aspects that enhance basketball athletes' mental wellness and performance while mitigating burnout.

2. Materials and Methods

The quantitative method was used to conduct the research. At the same time, the nature of the research was correlational. This is due to the fact that correlations were sought between the main variables of the research. In addition, the research is also characterized as synchronic. A synchronic survey is characterized by the fact that it conducts measurements only once and at a specific point in time. All conclusions drawn are based on these single measurements [41]. At this point, it is noted that the main variables of the research were three: 1) burnout, 2) resilience and 3) satisfaction of basic psychological needs. Due to the design of the survey, since it was correlational, there were no independent and dependent variables. Non-probability sampling and more specifically convenience sampling was used. In this sampling, individuals were selected who were able to participate in the study and who were willing to participate [42]. Thus, a sample was eventually formed based on a total of 393 basketball athletes.

A structured questionnaire was used to collect the survey data. The questionnaire was created using Google Forms for electronic distribution and data collection. The beginning of the questionnaire was related to the demographic characteristics of basketball athletes. In this section, six closed-ended questions were placed with specific response options. The questions were related to 1) gender, 2) age, 3) educational level, 4) marital status, 5) the league the athletes played in (Basket League-A1, Elite League-A2, National League 1, National League 2, Amateur-Local Level), and 6) the years each individual was a member of a basketball team.

Resilience was then measured. To assess this variable, the Nicholson McBride Resilience Questionnaire (NMRQ) [43] was used to assess this variable. The instrument includes 12 closed-ended questions answered on a 5-point Likert scale ranging from 1 - Strongly Disagree to 5 - Strongly Agree. The sum of the responses results in the final score corresponding to the levels of Resilience. Scores from 0 to 37 correspond to the process of developing Resilience, scores from 38 to 43 correspond to already developed Resilience, scores from 44 to 48 correspond to high levels of Resilience and scores from 49 to 60 correspond to excellent levels of Resilience.

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Next, the burnout measurement was followed. The Athlete Burnout Questionnaire (BRQ) tool [3] was used to assess this variable. The instrument includes 15 closed-ended questions answered on a 5-point Likert scale ranging from 1 - Almost Never to 5 - Almost Always. The instrument includes three factors; 1) Physical/Emotional Exhaustion, 2) Reduced Accomplishment and 3) Sport Devaluation. Questions 2, 4, 8, 10 and 12 correspond to the first factor, questions 1, 5, 7, 13 and 14 correspond to the second factor and questions 3, 6, 9, 11 and 15 correspond to the third factor. The averages of the questions in each factor are calculated to obtain the corresponding variables. It is emphasized that questions 1 and 14 have reverse significance so they are scored inversely. As the average in each factor increases, the burnout levels actually increase.

Finally, this was followed by the measurement of Basic Needs is Sport. To assess this variable, the Basic Psychological Need Satisfaction Scales (BPNSS) instrument [20,44] was used. The instrument includes 12 closed-ended questions answered on a 5-point Likert scale ranging from 1 - I strongly disagree to 5 - I strongly agree. The average of the responses leads to the final score corresponding to the levels of satisfaction of psychological needs.

The survey data were collected during the months of September and October of the year 2024. Prior to formal data collection, the questionnaire was pilot distributed to five basketball athletes to identify potential errors or misunderstandings in the questions. The questionnaire was approved before being distributed by the appropriate individuals. Prior to answering the questions on the questionnaire, participants were asked to provide consent for their participation, as well as to review the informational information about the study. It should be noted that respondents' participation was voluntary and no individual was pressured to take part in the survey. The completion of the survey data collection led to the start of the survey data analysis process.

The data analysis was conducted using SPSS 25.0.0. In order to use this statistical package, it was necessary for the data to take the form of numbers. In other words, the responses were coded and each response took the form of a number. Then, the scores of each variable as well as factor variable were calculated as mentioned above. Next, descriptive statistics were performed to present either through graphs or tables the results of the sample demographics. The presentation was done through frequencies and percentages. At the same time, a reliability test was done through Cronbach's alpha index. After the reliability check, descriptive statistics was again performed through measures of central tendency and dispersion to present the levels of the main variables of the study as well as their factors. Then, a data distribution test of all variables was performed. For this purpose, Shapiro Wilk test was used. Finally, inferential statistics were performed using Spearman test, a non-parametric test since the data of the variables were shown not to follow the normal distribution. Similarly, Mann Whitney and Kruskal Wallis test were used. In the case of gender, the first test was preferred, while for age and category of competence, the second test was preferred in the inductive tests, the level of significance was 0.05.

3. Results

The reliability test of research variables has been through Cronbach's alpha index. All variables proved reliable as long as they were greater than 0.7, as shown in Table 1.

Table 1. Variable reliability.

Factor	Cronbach's Alpha	N of Items
Resilience	.887	12
Emotional / Physical Exhaustion	.854	5
Reduced Accomplishment	.730	5
Sport Devaluation	.800	5
Basic Needs in Sports	.874	4

[45].

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The results, according to Table 2, showed that the Resilience variable had a minimum value of 20 and a maximum value of 60. The mean value for this variable was 44.47 points and had a standard deviation equal to 7.35 points. Therefore, the resilience levels of the basketball athletes in the sample in this study were high based on the meaning of the respective variable. The Burnout variable was based on three key factors with a minimum value of 1 and maximum value of 5. The mean value for the Emotional/Physical Exhaustion factor was 2.25 points and had a standard deviation equal to .82 points, resulting in levels considered low to moderate based on the mean of the corresponding variable. With regard to the Reduced Accomplishment factor, it was shown that the mean value was 2.54 points and had a standard deviation equal to .73 points. Therefore, the levels to be moderate based on the mean of the corresponding variable. Regarding the Sport Devaluation factor, the mean value was found to be 2.06 points and had a standard deviation equal to .88 points, thus the levels to be considered low to moderate based on the mean of the corresponding variable. Finally, the results showed that the Basic Needs in Sports variable had a minimum value of 2 and a maximum value of 5. The mean value for this variable was 3.63 points and had a standard deviation of .63 points. Therefore, the Basic Needs in Sports levels of the athletes in the sample were slightly high based on the mean of the corresponding variable.

Table 2. Measures of Central Tendency and Dispersion.

	N	Minimum	Maximum	Mean	Std. Deviation
Motivation	393	20	60	44.47	7.347
Valid N (listwise)	423				
Emotional / Physical Exhaustion	393	1	5	2.25	.827
Redused Accomplishment	393	1	5	2.54	.728
Sport Devaluation	393	1	5	2.06	.877
Valid N (listwise)	393				
Basic Needs in Sports	393	2	5	3.63	.633
Valid N (listwise)	393				

[3].

According to Table 3 for the Resilience variable, the test returned a statistically significant result (K-S(N = 393) = .139, p = .001). Therefore, the Resilience variable does not follow the normal distribution. The analysis performed for the variable Emotional / Physical Exhaustion, the test returned a statistically significant result (K-S(N = 393) = .092, p < .01), for the variable Reduced Accomplishment, the test returned a statistically significant result (K-S(N = 393) = .072, p < .01), as well as for the variable Sport Devaluation statistically significant result (K-S(N = 393) = .118, p < .01). Therefore, all 3 variables of Burnout do not follow the normal distribution. Similarly for Basic Needs (K-S(N = 393) = .064, p = .001).

Table 3. Resilience variable distribution control.

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Resilience	,063	393	.001
Emotional/ Physical Exhaustion	,092	393	,000

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Redused Accomplishment	,072	393	,000
Sport Devaluation	,118	393	,000
Basic Needs in Sports	.064	393	.001

[43].

The exploration of the relationships of the survey variables, as shown in Table 4, was done through Spearman's rho index. This test was chosen as the survey variables, as demonstrated above, did not follow the normal distribution. Initially, it was found that the Resilience variable showed a statistically significant correlation with the Emotional/Physical Exhaustion variable (rs = .-211, p < .01). The correlation was negative and weak in terms of intensity. Therefore, as Resilience increases, Emotional/Physical Exhaustion decreases. Next, it was found that the Resilience variable showed a statistically significant correlation with the Reduced Accomplishment variable (rs = .-375, p < .01). The correlation was negative and weak in terms of intensity. Therefore, as Resilience increases, Reduced Accomplishment decreases. It was also found that the Resilience variable showed a statistically significant correlation with the Sport Devaluation variable (rs = .-277, p < .01). The correlation was negative and weak in terms of intensity. Therefore, as Resilience increases, Sport Devaluation decreases. From the above, it can be seen that Resilience shows a statistically significant inverse relationship with Burnout. Therefore, as Burnout levels increase in the basketball athletes in the sample, Resilience levels decrease. At the same time, it was found that the Resilience variable showed a statistically significant correlation with the Basic Needs in Sports variable (rs = .336, p < .01). The correlation was positive and weak in terms of intensity. Therefore, as Resilience increases, so do Basic Needs in Sports. Therefore, as Resilience levels increase in the basketball athletes in the sample, so does Basic Needs in Sports.

Table 4. Correlations of variables (Spearman's rho).

Spearman's rho		**1**	**2**	**3**	**4**	**5**
Resilience (1)	Correlation Coefficient	1.000	-.211**	-.375**	-.277**	.336**
	Sig. (2-tailed)	.	.000	.000	.000	.000
	N	393	393	393	393	393
Emotional / Physical Exhaustion (2)	Correlation Coefficient	-.211**	1.000	.352**	.542**	-.250**
	Sig. (2-tailed)	.000	.	.000	.000	.000
	N	393	393	393	393	393
Redused Accomplishment (3)	Correlation Coefficient	-.375**	.352**	1.000	.496**	-.478**
	Sig. (2-tailed)	.000	.000	.	.000	.000
	N	393	393	393	393	393
Sport Devaluation (4)	Correlation Coefficient	-.277**	.542**	.496**	1.000	-.367**
	Sig. (2-tailed)	.000	.000	.000	.	.000
	N	393	393	393	393	393

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Basic Needs in Sports (5)	Correlation Coefficient	.336**	-.250**	-.478**	-.367**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.
	N	393	393	393	393	393

Correlation is significant at the 0.01 level (2-tailed). [43].

Another statistically significant correlation, is observed between the Emotional/Physical Exhaustion variable and the Basic Needs in Sports variable (rs = -.250, p < .01). The correlation was negative and weak in terms of intensity. Therefore, as Emotional/Physical Exhaustion increased, Basic Needs in Sports decreased.

Still, there is another statistically significant correlation between the Reduced Accomplishment variable and the Basic Needs in Sports variable (rs = -.478, p < .01). The correlation was negative and weak in intensity. Therefore, as Reduced Accomplishment increased, Basic Needs in Sports decreased.

Finally, there is another statistically significant correlation between the Sport Devaluation variable and the Basic Needs in Sports variable (rs = -.367, p < .01). The correlation was negative and weak in intensity. Therefore, as Sport Devaluation increases, Basic Needs in Sports decreases. From the above, it can be seen that Burnout shows a statistically significant inverse relationship with Basic Needs in Sports. Therefore, as Burnout levels increase in basketball athletes in the sample, Basic Needs in Sports decreases. At the same time, it is observed that the variable Emotional / Physical Exhaustion showed a statistically significant correlation with the variable Reduced Accomplishment (rs = .352, p < .01). The association was positive and weak in intensity. Therefore, as Emotional/Physical Exhaustion increases, so does Reduced Accomplishment. Therefore, as the levels of Emotional / Physical Exhaustion in the basketball athletes in the sample increase, the levels of Reduced Accomplishment increase.

It is also observed that the Emotional/Physical Exhaustion variable showed a statistically significant correlation with the Sport Devaluation variable (rs = .542, p < .01). The correlation was positive and moderate in terms of intensity. Therefore, as Emotional/Physical Exhaustion increases, Sport Devaluation increases. Therefore, as Emotional/Physical Exhaustion levels increase in the basketball athletes in the sample, Sport Devaluation levels increase.

Finally, it is observed that the Reduced Accomplishment variable showed a statistically significant correlation with the Sport Devaluation variable (rs = .496, p < .01). The correlation was positive and moderate in terms of intensity. Therefore, as Reduced Accomplishment increases, Sport Devaluation increases. Therefore, as Reduced Accomplishment levels increase in the basketball athletes in the sample, Sport Devaluation levels increase. From the above, it can be seen that the Burnout factors show a statistically significant relationship with each other. Therefore, as the levels of one Burnout factor increase, the levels of the other Burnout factors also increase.

The influence of the Category of competence on burnout was tested by Kruskal Wallis, as shown in Table 5. According to the results, the Category of competence has a statistically significant influence on Emotional/Physical Exhaustion (H(4) = 12,839, p = .012). In fact, in the Pairwise comparisons with Kruskal Wallis test it was shown that basketball athletes at amateur level show statistically significantly lower levels of burnout in the Emotional / Physical Exhaustion factor, compared to athletes in category A1 Basket League Women (p = .042) and athletes in category National League 1 (p = .015).

Table 5. Category of competence influence on burnout.

	Emotional / Physical Exhaustion
Kruskal-Wallis H	12.839

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df	4
Asymp. Sig.	.012

[20].

For the influence of age on burnout, Kruskal Wallis was tested. According to Table 6 results, age statistically significantly affects Resilience (H(4) = 10,308, p = .036), Emotional/Physical Exhaustion (H(4) = 12,839, p = .012) and Sport Devaluation (H(4) = 10,427, p = .034).

Table 6. Age influence on resilience and burnout.

	Resilience	Emotional / Physical Exhaustion	Sport Devaluation
Kruskal-Wallis H	10.308	11.615	10.427
df	4	4	4
Asymp. Sig.	.036	.020	.034

[42].

More specifically, it was found that people over 37 years of age show statistically significantly higher levels of Resilience, compared to people 23 to 29 years of age (p .021). At the same time, people 23 to 27 years old show statistically significantly higher levels of Burnout in the Emotional / Physical Exhaustion factor, compared to people 16 to 22 years old (p = .018). Finally, people 23 to 27 years old show statistically significantly higher levels of Burnout in the Sport devaluation factor, compared to people 16 to 22 years old (p = .023).

The influence of gender on Resilience was tested by Mann Whitney. According to Table 7 results, gender has a statistically significant influence on resilience (U = 10267.500, p < .01). In fact, it is observed that men have statistically significantly higher levels of Resilience (Mean Rank = 212.34), compared to women (Mean Rank = 152.66).

Table 7. Gender influence on resilience.

	Resilience
Mann-Whitney U	10267.500
Wilcoxon W	15418.500
Z	-4.556
Asymp. Sig. (2-tailed)	.000

[41].

4. Discussion

The results of the study demonstrate that the levels of resilience of the athletes in the sample were high, based on the mean of the corresponding variable. At the same time, the levels for the Emotional/Physical Exhaustion variable of the athletes were found to be low to moderate, as were the levels for the Sport Devaluation variable. On the other hand, the levels of Basic Needs in Sports were found to be slightly high, according to the mean of the corresponding variable. These results are intimately connected to the theoretical framework proposed by Gustafsson et al. [1], who contend that burnout among athletes correlates with a decline in psychological resilience and manifests as emotional exhaustion, diminished pleasure, and disengagement from sporting activities. Moreover, the results underscore the significance of fostering resilience as a protective mechanism against basketball burnout. Research suggests that resilient individuals are better equipped to manage stressors and recover from failure, which can significantly mitigate emotional exhaustion and enhance overall well-being [5]. This suggests that interventions aimed at improving psychological

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resilience could play a critical role in maintaining basketball athletes' motivation and enjoyment in their sport, ultimately reducing the risk of withdrawal or disengagement [46]. Furthermore, fostering social support networks can further enhance athletes' resilience by providing them with key resources to address the challenges inherent in competitive sports.

Findings also suggest that increased resilience is associated with a reduction in Emotional/Physical Exhaustion, Reduced Sense of Accomplishment and Reduced Sport Appreciation. This observation is consistent with the theory of Raedeke et al. [2], who describes burnout as a multidimensional syndrome involving emotional and physical exhaustion, as well as a reduced sense of accomplishment. Therefore, a statistically significant inverse relationship between psychological resilience and burnout emerges. As the levels of burnout increase in the basketball athletes in the sample, the levels of mental resilience decrease. Comprehending this association may result in the formulation of intervention strategies designed to bolster mental resilience, thereby mitigating the effects of burnout and promoting the overall well-being of athletes, as evidenced by the findings of Fletcher and Sarkar [5]. Moreover, the significance of social support networks cannot be overstated in fortifying resilience among athletes. Empirical research indicates that the perceived accessibility of such networks plays a crucial role in an athlete's capacity to navigate the stressors that are intrinsic to competitive sports [47]. By fostering robust relationships with coaches, teammates, and family members, athletes can establish a protective barrier against sensations of isolation and emotional fatigue, which frequently precede burnout. Additionally, interventions designed to enhance intra-team communication abilities have demonstrated potential in augmenting overall mental health and performance outcomes for athletes, implying that the development of interpersonal dynamics may constitute an essential element in resilience training programs [5]. Thus, incorporating strategies that promote both psychological resilience and strong social support systems could lead to more sustainable sporting careers and well-being.

Furthermore, it is observed that as the levels of mental resilience in athletes increase, so do the levels of Basic Needs in sport. This is in accordance with the foundational principles of Self-Determination Theory, which accentuate the necessity of addressing fundamental psychological needs to nurture intrinsic motivation and the overall health of athletes [9]. In contrast, an escalation in the decreased sense of success and decreased sport appreciation corresponds with a decline in Basic Needs within the realm of sports, which is congruent with the findings of Gustafsson et al. [1], who contend that the absence of fulfilled psychological needs exacerbates burnout. Also, the interaction between resilience and burnout extends beyond individual athletes to include team dynamics and training methodologies. Research shows that coaches who foster an environment of psychological safety can significantly enhance resilience in their athletes by encouraging open communication and emotional expression [46]. This nurturing environment not only alleviates the pressures linked to competitive athletics but also fosters a unified sense of purpose among team members, thereby strengthening their dedication to one another and to the sport itself. For instance, research has indicated that teams distinguished by elevated levels of social cohesion encounter diminished instances of burnout, as they extend reciprocal support during challenging periods [47]. Thus, incorporating resilience training into team practices could serve as a vital strategy for reducing burnout and enhancing overall performance in sporting environments.

Emotional/physical exhaustion appeared to be associated with increased levels of Reduced Sense of Success and Reduced Sport Appreciation. At the same time, an increase in Reduced Sense of Success was associated with an increase in levels of Sport Appreciation Reduction. These findings align with the theoretical framework posited by [2,3], which suggests that burnout functions as an evaluative mechanism through which athletes gauge their capacity to cope with the sport's demands, ultimately culminating in their withdrawal from athletic participation. In essence, the determinants of burnout reveal a statistically significant interrelation, implying that an augmentation in one determinant is linked to an escalation in the remaining determinants. Recognition of these relationships may lead to targeted interventions that enhance mental resilience and promote a healthier lifestyle for athletes while reducing the negative effects of burnout; furthermore, the implications of promoting resilience extend beyond individual athletes to include broader team

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dynamics and coaching strategies. Research shows that coaches who actively promote resilience in their teams can significantly improve overall performance by instilling a culture of perseverance and adaptability [46]. This methodology not only serves to alleviate burnout but also fosters a milieu in which athletes are motivated to confront challenges collectively, thus promoting team solidarity and morale. For instance, research indicates that teams exhibiting elevated levels of psychological safety encounter diminished rates of emotional fatigue as members provide mutual support during common experiences of stress and hardship [47]. Consequently, incorporating resilience training into coaching methodologies could serve as a central strategy for maintaining athlete engagement and satisfaction while reducing the risk of burnout across sport disciplines.

At the athlete category level, it was found that basketball athletes at amateur level showed statistically significantly lower levels of Emotional/Physical Exhaustion, compared to athletes in the A1 Basket League Women and National League 1. This difference suggests that amateur athletes may have a better balance between training and their personal lives, which helps to reduce stress and exhaustion compared to professional athletes, as supported by Cohn [4], who notes that chronic stress can lead to behavioral responses, including reduced performance and withdrawal from the sport. Furthermore, the implications of these findings extend to the need for tailored interventions that take for example, while amateur athletes may benefit from maintaining a healthy work-life balance, professional athletes may need more structured support systems designed to enhance resilience in the midst of increased pressures and expectations [4]. Research suggests that developing specific coping strategies, such as awareness training or cognitive behavioral techniques, can significantly enhance resilience and mitigate burnout symptoms at various levels of competition [33,35]. Moreover, cultivating a milieu wherein athletes are encouraged to candidly articulate their difficulties can engender a culture of resilience among teams, consequently resulting in enhanced performance outcomes. Therefore, acknowledging the nuanced variances in athletes' experiences is imperative for the formulation of effective interventions designed to advance mental well-being and ensure the continuity of sporting participation over time.

In terms of age, athletes over 37 years of age showed statistically significantly higher levels of mental resilience compared to athletes aged 23-29 years. On the other hand, those aged 23-27 years showed statistically significantly higher levels of Emotional/Physical Exhaustion and Reduced Sport Appreciation, compared to those aged 16-22 years. This finding highlights the importance of age and experience in sport psychology, as older athletes appear to have developed better strategies for coping with sport-related challenges [5].

Finally, the data shows that male basketball athletes exhibit statistically significantly higher levels of psychological resilience compared to female athletes. This difference can be attributed to a variety of factors, such as gender-related social roles and expectations, as well as different approaches to training and coaching between the genders. This observation is consistent with the results of Banack et al. [14], who argue that athletes who feel supported by their team and coaches show greater satisfaction and better performance, while gender differences may influence resilience and perceptions of support; furthermore, the influence of social support systems cannot be overestimated in enhancing resilience among athletes. Research shows that a strong network of peers and mentors significantly mitigates feelings of isolation and stress, which are common precursors to burnout. For example, teams with established communication channels and supportive relationships tend to experience lower levels of emotional exhaustion as members feel empowered to share their struggles and ask for help when needed [46]. Furthermore, incorporating team building exercises that focus on strengthening interpersonal connections can foster an environment where athletes thrive not only individually but also collectively, enhancing team cohesion and performance outcomes. This holistic approach suggests that addressing both individual psychological factors and broader team dynamics is essential to reduce the risks of burnout while promoting ongoing sporting engagement.

4.1. Limitations

Upon examining the research methods, one may see a restriction about the sampling and, therefore, the research sample. More specifically, it is worth noting that the survey sample, although

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large in number, cannot be considered representative of the population as it is derived from non-probability sampling. Also, the sample's response to a questionnaire does not come with a guarantee of the truthfulness of the answers, as it is not possible to check how truthful an individual's response is when he or she completes a questionnaire.

4.2. Future Recommendations

The study's framework, heavily reliant on non-probability sampling and self-reported data, poses significant challenges to the generalizability and validity of the results. Future research endeavors could enhance representativeness by employing probability sampling techniques, which would facilitate insights pertinent to a larger demographic and mitigate bias. Increasing the diversity of the sample would enrich findings by encompassing responses from a wide array of demographic segments. The implementation of longitudinal methodologies can deepen comprehension by illustrating trends over time rather than merely presenting isolated data points. The incorporation of data validation strategies, such as follow-up interviews or triangulation with alternative sources, can bolster the dependability of responses, thereby affirming the veracity of self-reported information. Adopting mixed-methods strategies that integrate quantitative surveys with qualitative approaches would yield a more comprehensive understanding, unveiling intricate motivations and behaviors. Ultimately, diligent pilot testing is instrumental in identifying and addressing ambiguities within questionnaires, which subsequently reduces misinterpretation and elevates the quality of the data amassed. The implementation of these enhancements would fortify future studies, augmenting both the precision and richness of their outcomes, thereby leading to more validated inferences.

5. Conclusions

The research demonstrates how vital resilience is for basketball players to avoid burnout. According to prior research and theoretical hypotheses, more resilient players were less physically and emotionally weary, less proud of their successes, and enjoyed the exercise less. Understanding the link between resilience, basic sport's needs, and burnout could help people come up with focused ways to improve their overall health and well-being, such as psychological education programs and stronger social support networks. The differences seen by age, gender, and type of sport show how specific methods are needed to make management techniques that will help people become more mentally resilient and lessen the bad effects of burnout. As a result, this makes the sports setting better and more long-lasting.

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