



## Relationship between Perfectionism and Skill Performance in Adolescent Futsal Players

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### Keywords

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### Abstract

**Background:** Adolescent's perfectionism primarily has related to stress symptoms. Relationship between aspects of perfectionism and sport performance in no-stress training accompanied with inconsistent results.

**Objective:** Purpose of the present study was to investigate how different aspects of perfectionism predict futsal skill performances during stressful training in adolescent.

**Methods:** Participants were 101 adolescent futsal players. They completed perfectionism inventory, then performed a futsal skill during three blocks of four trials. Two indices took into account: time and performance.

**Results:** There was a significant relationship between positive perfectionism and performance during blocks 1 and 3, when negative perfectionism was considered. A significant positive relationship between negative perfectionism with both time and performance during block 3 was observed. Also, a significant positive correlation in terms of interaction between high positive and high negative perfectionism with the performance in during block 3 found.

**Conclusion:** The findings suggest that positive perfectionism in athletes during training was correlated with high levels of performance, but when crossing blocks, that relationship removed. Also, after observing other's performance, performance in people high negative perfectionism during consecutive trials improved. When interaction between positive and negative perfectionism was considered to predict sport performance, performance in people high positive perfectionism during stressful training impaired.

### Introduction

Perfectionism is a personality trait tightly associated with sport and academic performances and other life domains where ranking, evaluation, and competition play a major role (i.e., Stoeber, 2012). This personal structure has a multidimensional nature (Sellars, Evans & Thomas, 2016) and its main characteristics are a kind of striving and setting high standards along with the tendency towards precise evaluation of individual behavior and high sensitivity to mistakes (Flett & Hewitt, 2002). Some researchers claim that perfectionism weakens and undermines

performance, but others believe that if not accompanied by self-criticism, it can increase motivation to promote individual efforts and achievement (Hill, Hall, Appleton, & Kozub, 2008). In the field of performance psychology, few studies have been undertaken to examine the role of perfectionism in sport competencies. Based on this, the purpose of the present study was to investigate how different aspects of perfectionism predict futsal skill performances during stressful training in adolescents.

There is a consensus that two dimensions of perfectionism should be distinguished. In the first

dimension, perfectionistic striving is an adaptive or positive dimension and includes those aspects of perfectionism associated with striving for perfection and setting high standards. This positive perfectionism can motivate individuals and reinforce their efforts to succeed, thereby leading to positive results (Enns & Cox, 2002). This dimension correlates positively with adaptation indices such as positive affect, endurance, and high academic performance (Bieling, Israeli, Smith, & Antony, 2003; Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). The second dimension, the perfectionistic concern, is a maladaptive or negative dimension referring to aspects of perfectionism associated with high amount of concern about making mistakes, fear of performance evaluation from others and discrepancy between the individual expectations and his/her performance (Stoeber, 2012; Stoeber & Otto, 2006). Negative perfectionism exposes the person with different kinds of stresses by creating extreme amounts of desire in the person to set high standards and irrational thoughts to achieve them (Flett & Hewitt, 2006). This dimension is also known as self-critical perfectionism (Dunkley, Zuroff & Blankstein, 2003) and is positively correlated with maladaptation indexes such as depression, stress, and anxiety in adolescents (Stoeber & Otto, 2006; Hewitt et al. 2002). Relying on these two dimensions, Rice and Ashby (2007) introduced three groups of perfectionism: Healthy or adaptive perfectionism (those with high in positive perfectionism and low in negative perfectionism), unhealthy or maladaptive

perfectionism (people with high in both positive and negative perfectionism), and non-perfectionism (those with low in positive perfectionism).

There have been few studies examining the subject of perfectionism in adolescents. A study conducted by Accordino, Accordino, and Slaney (2000), showed the relationships between discrepancy in performance and expectations (as one aspect of negative perfectionism) with depression in adolescents, setting high standards (as one of the aspects of positive perfectionism) with mastery orientation (the desire to challenge), work orientation (the desire to work hard) and academic success. Also, Stoeber and Rambow (2007) found that effort-oriented perfectionism positively correlated with the desire to succeed, motivation, and school activities, while negative perfectionism associated with fear of failure and depression symptoms. In examining the possible relationship between positive and negative perfectionism with competitive state anxiety in adolescent handball players, Alizadeh Pahlavani, Alam, Monazami and Bahmaei (2013) found no negative correlation between positive perfectionism and competitive-state anxiety but a positive correlation between negative perfectionism with competitive state anxiety. Both dimensions of perfectionism predicted the competitive state anxiety. Generally, when adolescents with adaptive (positive) perfectionism do not achieve their desired standards become disappointed and utilize those standards as a motivation for better performance, paving their

ways to reach high levels of competencies. In contrast, in such a condition those adolescents with maladaptive (negative) perfectionism become anxious and, due to the discrepancy between their desired high standards and their performances, mainly focus on deficiencies, consequently, their performances decrease while doing efforts (Rice & Slaney, 2002). Thus, it negatively impacts on their motivation and well-being. Psychological studies conducted on adolescents have mainly considered perfectionism as a personality trait that is associated with certain behavioral disorders in adolescents such as stress, depression, and anxiety. Therefore, it may negatively affect their motor functions. This might be due to the fact that most studies have focused on the negative aspects of perfectionism rather than positive ones. Also, in the field of performance psychology, there have been few studies examining the role of perfectionism in sport competencies.

There have been few studies investigating the relationship between perfectionism and sport performance during training. In a study, Anshel and Mansouri (2005) asked athletes to complete positive and negative perfectionism questionnaires after they practiced a body balancing task on the stabilometer for 20 trials. There was no feedback during a half of the practice and the other half was followed by negative feedback. In no feedback conditions, there was no relationship between positive and negative aspects of perfectionism and motor performance, but in terms of negative feedback, both aspects decreased the performance. One of the limitations of Anshel and Mansouri's

(2005) study was the fact that the measured motor performance was an experimental balancing task. Although this ability is one of the main requirements only for some sport activities, it lacks the appropriate predictive validity to be performed in real conditions and competitions between athletes.

In a study done by Stoll, Lau, and Stoeber (2008), university student athletes performed four series of seven trials of a basketball pivot step skill after completing a positive and negative perfectionism questionnaire. The results showed that striving for perfection during the training can predict proper performance on the new task. Negative reaction to imperfection (negative perfectionism) did not correlate with the performance in consecutive trials. But athletes with both positive and negative perfectionism (i.e. those considered unhealthy perfectionists according to Stoeber & Otto, 2006), showed more performance improvement during consecutive trials. This unexpected finding of the study is not consistent with the existing assumptions. To explain this unexpected finding, they claimed that the athletes with high levels of positive and negative perfectionism wanted to do their best during training, but their poor performance on the first trials led to negative reactions and motivated them to improve their performance during the next trials. But, those with high positive perfectionism not showing negative reactions towards their poor performances do not worry about their poor performance and are not motivated to improve their performance between trials. In an earlier study,

Stoeber (2012) claimed that this justification is challenging and negative emotional reactions usually lead to performance deficiency not its improvement. On the other hand, Stoll et al (2008) used a different basketball task which was performed in no stress conditions and they concluded that if the sport skill had been performed near to competition conditions, the results would have been changed.

Training and exercising the competition conditions and skills show more similarity to the process of skill acquisition and performance compared to other physical trainings and individual technical skills separately (Williams & Hodges, 2005) and, thereby, increases participation in the decision-making process in players during maintaining the dynamic skill. In another study, Stoeber, Uphill, and Hotham (2009) investigated the relationship between perfectionism and competitive performance in triathlon athletes. The results of the two studies showed that only positive perfectionism predicted the triathlon athletes' performance and there was no relationship between performance and negative perfectionism in these athletes. Also, triathlon athletes who had high in positive perfectionism might have set more performance-oriented goals for the competition compared to those with low in positive perfectionism.

Studying perfectionism dimensions in terms of adults' athletic performance has shown some contradicting results (Stoll, 2008; Stoeber, 2012). In adolescents, when this psychological construct was investigated along with other variables such as

stress, anxiety and depression (Hewitt, Caelian, Flett, Sherry, Collins, & Flynn, 2002; Stoeber & Rambow, 2007) and motivation and academic activities (Einstein, Lovibond, & Gaston, 2000), the results showed a positive correlation of perfectionism with stress, depression, and anxiety symptoms and its negative correlation with motivation and academic activities.

As far as we know, only one study has examined the relationship between perfectionism and sport performance during training in adults (Stoll et al., 2008). Moreover, the relationship between perfectionism and skill performance in training adolescent athletes has not been addressed considerably in the literature. Therefore, the present study aimed to reveal if futsal skill performance in adolescent competitive futsal players is influenced by the characteristics of their perfectionism.

### Method

The participants were 101 male adolescent's futsal players (aged  $14 \pm 1.97$  years) from futsal clubs in Kurdistan Province, Iran, attending the National Championships League, divisions 2 and 3 ( $2.8 \pm 0.95$  years of experience). To increase the participants' motivation and commitment, they were promised that the best participants will be awarded.

### Procedure

At first, perfectionism questionnaires were completed. Then participants were asked to perform a dynamic motor task (combination of

dribbling and shooting skills) within three blocks of four trials near to the actual competition condition. The task was initially illustrated by a competent futsal player for all participants. The task was performed in four-member groups. Initially, each participant performed two blocks of the task individually and then took a rest. When all the members of the groups performed their two block tasks, the illustrator performed the last block. During the rest, participants observed and compared each other's performances. Each performance included two parts: 1) Dribbling, i.e. the time interval between the first ball touching from the start line to the last ball touching at the shooting moment of (in seconds), and 2) Shooting, i.e., the accuracy of the goal.

## Measures

### Perfectionism

In order to evaluate the positive or adaptive perfectionism (perfectionistic striving) and negative or maladaptive perfectionism (negative reaction to imperfection) during training, some items were taken from multidimensional Inventory of perfectionism in sport (Stoeber, Otto, & Stoll, 2004). This scale has previously been employed by Stoeber, Stoll, Salmi, and Tiikkaja (2008) and Stoll et al. (2008). The questionnaire was two parts. Each included 6 items that participants completed on a 6-point scale from 1 (never) to 6 (always). To validate the quality of research instrument, first, method of back-translation was used. After translation of the English version of questionnaire to Persian, two translators (one of them soccer

coach) were asked to translate it to English. With comparison between back-translated and original English versions, they reached an agreement on terms and concepts. Afterwards, to face validity of the translated questionnaire was confirmed by some sport sciences experts and soccer coaches. Finally, to evaluate reliability of the Persian version of the instrument, Cronbach  $\alpha$  showed 0.69 and 0.85 for positive and negative perfectionism scale, respectively. Thus it showed an appropriate internal consistency.

### Task

The task involved a combination of dribbling and shooting skills towards the futsal goal with in front of the goalkeeper. Training field was  $6 \times 12$  square meters. Participants had to start dribbling from the start line and after running for 4.25 meters they reached the defender. In order to make near to competition conditions, a player has been assigned as defender who defended only with 50% effort. The attacker had to move forward 4.25 meters after dribbling the defendant and to shoot before reaching the shooting line. In order to simulate real conditions, a goalkeeper stood in the goal and kept the goal with 50% effort. When the ball was sent to score areas 1 and 2, the goalkeeper could react. Goal was divided into 9 parts (1, 2, 3, or 5 score parts). Therefore, the total score of each block was 0 to 20. If the ball touched vertical or horizontal goalpost, it was equal to 1 score for the participants, and if it went out, it was 0. To evaluate the participants' performances, the time and performance (points) averages of each block were

counted and were analyzed as Time 1-3 and Performance 1-3.

### Results

The mean and standard deviation of the variables are shown in Table 1. The correlation between the two aspects of perfectionism during training and time and futsal skill performance are shown in Table 2. Interestingly, positive perfectionism was only positively and significantly correlated with the performance during the block 1,  $r = 0.31$ ;  $p < 0.001$ .

High positive perfectionism, but not negative, correlated with better performance but only in the first block of trials. In contrast, high negative perfectionism showed significant correlation with time and performance in block 3,  $r = 0.21$ ;  $p < 0.05$  and  $r = 0.22$ ;  $p < 0.05$ , respectively. Unlike the previous findings (Stoeber, 2012), negative perfectionism correlated with performance in block 3.

**Table 1. Descriptive statistics**

Variable		M	SD
Perfectionism	Positive	28.21	1.86
	Negative	16.59	6.69
Skill Performance	Time 1	9.6	1.5
	Time 2	9.92	1.33
	Time 3	9.79	1.42
	Performance 1	5.78	2.64
	Performance 2	6.29	2.99
	Performance 3	7.89	3.42

Note: N=101. Perfectionism: perfectionism during training (mean scores with a range of 5-30). Times are as seconds; Performances are as points with a range of 0-20.

Results of multivariate regression analysis, however, showed a negative and significant role of positive perfectionism in predicting performance in block 3,  $\beta = -0.57$ ;  $p < 0.05$ , considering the interaction between positive and negative perfectionism (Table 3). This shows that when negative perfectionism is also considered in athletes with positive perfectionism, the negative aspect will dominate and prevent proper performance. When interactive effects between positive and

negative perfectionism was examined, there was a positive significant prediction role of between high positive perfectionism and negative perfectionism in block 3,  $\beta = 3.16$ ,  $p < 0.05$ . This means that individuals with both high in positive perfectionism and high in negative perfectionism showed the best performance in block 3 after the break time and observing others' performances.

**Table 2. Correlation between perfectionism and skill performance.**

Skill Performance		Perfectionism	
		Positive	Negative
Time	Time 1	0.12	0.13
	Time 2	-0.06	0.15
	Time 3	-0.09	0.21*
Performance	Performance 1	0.31**	0.09
	Performance 2	0.04	-0.005
	Performance 3	-0.09	0.22*

Note: N=101. \*p<0.05, \*\*p<0.01, two-tailed.

**Table 3. Hierarchical regression analysis for interaction of positive and negative aspects of perfectionism predicting skill performance.**

Variable		Step1			Step2	Step2				
		B	SE B	β		B	SE B	β		
Positive Perfectionism	Time 1	0.09	0.08	0.12	Positive Perfectionism	Time 1	-	0.21	-0.07	
	Time 2	0.04	0.02	0.15		Time 2	0.06	-0.2	0.19	-0.28
	Time 3	-	0.07	-0.1		Time 3	-	0.23	0.2	0.31
	Performance 1	0.42	0.13	0.3**		Performance 1	-	0.15	0.36	-0.11
	Performance 2	0.06	0.16	0.04		Performance 2	0.5	0.43	0.31	
	Performance 3	-	0.18	-0.1		Performance 3	-	1.05	0.47	-
	Time 1	0.03	0.02	0.13		Time 1	1.05	0.47	0.57*	
	Time 2	0.03	0.02	0.15		Time 2	-0.3	0.41	-1.37	
	Time 3	0.04	0.02	0.2*		Time 3	-	0.29	0.37	-1.49
Negative Perfectionism	Performance 1	0.03	0.04	0.08	Negative Perfectionism	Performance 1	-	0.4	-1.38	
	Performance 2	-	0.04	-		Performance 1	1.19	0.7	-3.02	
	Performance 3	0.11	0.05	0.23*		Performance 2	0.93	0.84	2.07	
	Time 1	0.01	0.01	0.01		Performance 3	-1.7	0.92	-3.39	
	Time 2	0.01	0.01	0.01		Time 1	0.01	0.01	0.01	
	Time 3	0.01	0.01	0.01		Time 2	0.01	0.01	0.01	
	Performance 1	0.04	0.02	3.14		Time 3	0.01	0.01	0.01	
	Performance 2	-	0.03	-2.11		Performance 1	0.04	0.02	3.14	
	Performance 3	0.06	0.03	3.61*		Performance 2	-	0.03	-2.11	
				Performance 3	0.06	0.03	3.61*			

Note: N=101. \*p<0.05, \*\*p<0.01, two-tailed. Time 1: R=0.18; R<sup>2</sup>=0.03; Adjusted R<sup>2</sup>= 0.013, Time 2: R=0.17; R<sup>2</sup>=0.03; Adjusted R<sup>2</sup>= 0.009, Time 3: R=0.22; R<sup>2</sup>=0.05; Adjusted R<sup>2</sup>= 0.032, Per 1: R=0.31; R<sup>2</sup>=0.1; Adjusted R<sup>2</sup>= 0.08, Per 2: R=0.04; R<sup>2</sup>=0.001; Adjusted R<sup>2</sup>= -0.02, Per 3: R=0.25; R<sup>2</sup>=0.06; Adjusted R<sup>2</sup>= 0.04, Interaction: positive perfectionism × negative perfectionism.

**Discussion and Conclusion**

The present study aims at investigating into the relationship between positive and negative dimensions (adaptive and maladaptive) of perfectionism with futsal skill performance in real training conditions among adolescent futsal players. The results showed that there is a positive

significant relationship between positive perfectionism and performance during blocks 1 and 3, when negative perfectionism is considered. Whereas there was a significant positive relationship between negative perfectionism with both time and performance during block 3. In other words, individuals with negative perfectionism

were trying to improve their performance in the following blocks. There was a significant positive correlation in terms of interaction between high positive and high negative perfectionism with the performance in during block 3.

Positive perfectionism is positively correlated with motor performance in athletes (Stoeber, Uphill & Hotham, 2009; Stoll et al, 2008). In the present study, adolescents high in positive perfectionism showed proper performance in the first block, but this was not the case in the second and third blocks. This result was consistent with Stoll et al (2008). They found that positive perfectionism in athletes during training was correlated with high levels of performance, but when performances proceeded from one block to another, the relationship between perfectionism and performance increment removed. This finding has also proved perfectionism paradox that is often experienced by athletes (Flett & Hewitt, 2005). People who consider themselves as high in positive perfectionism often are influenced by negative reaction to imperfections that is part of negative perfectionism characteristics during consecutive performances. People high in positive perfectionism show fewer negative reactions during poor performance, may not be so concerned about their next poor performances, so they are not motivated to improve their performance during trials. The participants of current study are also likely to be satisfied with their performance after they appropriately performed the first block and be indifferent (neutral) in terms of their next performances. On the other hand, in current

research participants were divided in two subtype, i.e., positive and negative perfectionism. The result was similar to prediction of performance of unhealthy or maladaptive perfectionistic (those high in both positive and negative perfectionism) in tripartite model of perfectionism by Rice & Ashby (2007). These individuals are always striving for high level of performance due to the fear of failure, therefore, when they are exposed to the stress induced by negative reaction to previous imperfections during consecutive trials, they frequently are faced with continuous imperfections and fail in their subsequent trials. In order to do more precise and exact evaluation in future, it is suggested that the participants are divided into tripartite (Rice & Ashby, 2007) and quadripartite (Gaudreau & Thompson, 2010) subtypes.

Our unexpected finding is that there was a positive and significant relationship between negative perfectionism and performance increment of the two futsal skill indices, i.e. time and performance in block 3 and this was consistent with Stoll et al (2008). During training, the participants were asked to rest after they performed two blocks and observe others' performance in this time interval. Therefore, it was expected that individuals' performance with positive perfectionism improve in the third block. Rice and Slaney (2002) also believed that adolescents with adaptive (positive) perfectionism dispositions they will not be disappointed when they don't achieve to their desired standards and make use of those standards as an incentive to facilitate better performance. But in that situation, adolescents with maladaptive



perfectionism (negative) dispositions become worried and so due to the discrepancy between high standards and their performance they are largely focus on defects so they have poor performances during attempts. In current study, probably observing others' performance serves as augmented feedback and because the nature and content of the feedback had not been controlled by the instructor, it was used in a self-control feedback form (Magill, 2011). Maybe, data obtained through observational feedback rather than self-criticism feedback caused participants to do self-assessment, become motivated and try to achieve success (Hill, Hall, Appleton & Kozub, 2008). In a study by Anshel and Mansouri (2005), there was no relationship between positive and negative perfectionisms with motor performance in no-feedback condition but both of them impaired motor performance when the negative feedback was introduced. It means that individual' motor performance is influenced by the feedback content. It is therefore possible that the nature and quality of augmented feedback serves as a mediator with respect to the relationship between perfectionism and sport performance. It is recommended that in future studies, the nature and quality of feedback provided to participants between trials can be controlled to make it clear whether these performances are due to different presumptions of individuals with positive and negative perfectionism about feedback information or not.

In the present study, the participants high in positive perfectionism showed high performance only in the first block but when negative

perfectionism also was considered in the performance prediction, there was a negative relationship between the performance of the participants with high in positive perfectionism in the third block, i.e. performance increment. The finding was in accordance with Stoeber's (2012) claim. He believed that negative affective reactions to perfectionism interacting with positive perfectionism usually lead to performance impairment not its improvement. On the other hand, this finding didn't consist with Stoll et al (2008). They found in no-stress conditions, individuals with both high in positive and high in negative perfectionism show high level of performance improvement in consecutive trials in a basketball skill. One of the stress resources are task difficulty (Hiebert, 1988) and the emphasis on achievement. When adolescent athletes performed futsal skills in difficult conditions similar to the competition, both the players and their coach were expected to show appropriate performance after several consecutive trials. Participants probably observed and evaluated each other's performances during the break time between the second and the third blocks, but adolescents' concerns about imperfections, fear of evaluation by others and other participants' reactions (Goyen & Anshel, 1998), caused their stress to be increased and their performance decreased. It is suggested that future studies investigate the performance of the subjects both with high in positive perfectionism and high in negative perfectionism and their stress reactions in different levels of task difficulty during the training session.

Investigating the relationship between positive and negative perfectionism with sport performance, people with both high in positive perfectionism and high in negative perfectionism improved their performance in the third block. After a break and observing others participants' performance, they showed their best performance in the third block. The findings were consistent with Stoll et al (2008). In their study, when subjects were considered as high in positive and high in negative perfectionists, they also improved their performance across the training blocks. They explained that athletes with high in both positive and negative perfectionism want to show their best performance during training but their poor performance at their first trials led to negative reactions that motivated them to be more serious and improved their performance during the next trials. They believed that this was similar to the sport performance of over-striving athletes. Those are people with high level of hope of success and high levels of failure avoidance and they are always motivated and try to improve their motor performance (Covington,1992). In other words, since high positive perfectionism includes high level of hope of success and negative perfectionism includes high level of failure avoidance (Stoeber & Becker, 2008; Stoeber & Rambow, 2007), subjects with both high in positive perfectionism and high in negative perfectionism behave in a similar way as over-striving people (Hall, Kerr, Kozub & Finnie, 2007). On the other hand, Stoeber et al (2008) also found that those subjects who showed high level of the two aspects of perfectionism during training, had also have

high levels of mastery- performance goals. In the present study since adolescent futsal players with high positive and high negative perfectionism did not have high performances in the first and second blocks, during the break time between the blocks, due to the received feedbacks from their surroundings and comparing their own performances with those of the others tried to focus on achievement of normative competence (Elliot & Conroy, 2005) and acquired enough motivation to perform skill in a better way.

### References

1. Accordino, D. B., Accordino, M. P., & Slaney, R. B. (2000). An investigation of perfectionism, mental health, achievement, and achievement motivation in adolescents. *Psychology in the Schools*, 37, 535-545.
2. Alizadeh Pahlavani, H., Alam, S., Monazami, M., & Bahmaei, S. (2013). The relationship of positive and negative perfectionism with competitive state anxiety in adolescent handball players. *Annals of Biological Research*, 4, 5, 216-221.
3. Anshel, M. H., & Mansouri, H. (2005). Influences of perfectionism on motor performance, affect, and causal attributions in response to critical information feedback. *Journal of Sport Behavior*, 28, 99-124.
4. Bieling, P. J., Israeli, A., Smith, J., & Antony, M. M. (2003). Making the grade: The behavioral consequences of perfectionism in the classroom. *Personality and Individual Differences*, 35, 163-178.
5. Covington, M. V. (1992). *Making the grade: A self-worth perspective on motivation and school reform*. New York: Cambridge University Press.
6. Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology*, 84, 234-252.
7. Einstein, D. A., Lovibond, P. F., & Gaston, J. E. (2000). Relationship between perfectionism and emotional symptoms in an adolescent sample. *Australian Journal of Psychology*, 52, 89-93.
8. Elliot, A. J., & Conroy, D. E. (2005). Beyond the dichotomous model of achievement goals in sport and exercise psychology. *Sport and Exercise Psychology Review*, 1, 17-25.
9. Enns, M. W., & Cox, B. J. (2002). The nature and assessment of perfectionism: A critical analysis. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 33-62). Washington, DC: American Psychological Association.

10. Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-13). Washington, DC: American Psychological Association.
11. Flett, G. L., & Hewitt, P. L. (2005). The perils of perfectionism in sports and exercise. *Current Directions in Psychological Science*, 14, 14-18.
12. Flett, G. L., & Hewitt, P. L. (2006). Positive versus negative perfectionism in psychopathology: A comment on Slade and Owens's dual process model. *Behavior Modification*, 30, 472-495.
13. Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14, 119-126.
14. Gaudreau, P., & Thompson, A. (2010). Testing a 2×2 model of dispositional perfectionism. *Personality and Individual Differences*, 48, 532-537. Doi: 10.1016/j.paid.2009.11.031
15. Goyen, M. J., & Anshel, M. H. (1998). Sources of acute competitive stress and use of coping strategies as a function of age and gender. *Journal of Applied Developmental Psychology*, 19, 469-486.
16. Hall, H. K., Kerr, A. W., Kozub, S. A., & Finnie, S. B. (2007). Motivational antecedents of obligatory exercise: The influence of achievement goals and multidimensional perfectionism. *Psychology of Sport and Exercise*, 8, 297-316.
17. Hewitt, P. L., Caelian, C. F., Flett, G. L., Sherry, S. B., Collins, L., & Flynn, C. A. (2002). Perfectionism in children: associations with depression, anxiety, and anger. *Personality and Individual Differences*, 32, 1049-1061.
18. Hiebert, B. (1988). Controlling stress: A conceptual update. *Canadian Journal of Counselling*, 22, 226-241.
19. Hill, A. P., Hall, H. K., Appleton, P. R., & Kozub, S. A. (2008). Perfectionism and burnout in junior elite soccer players: The mediating influence of unconditional self-acceptance. *Psychology of Sport and Exercise*, 9, 630-644.
20. Magill, R. A. (2011). *Motor Learning and Control: Concepts and Applications*, Mc Graw Hill, 336-340.
21. Rice, K. G., & Ashby, J. S. (2007). An efficient method for classifying perfectionists. *Journal of Counseling Psychology*, 54, 72-85. doi: 10.1037/0022-0167.54.1.72
22. Rice, K. G., & Slaney, R. B. (2002). Clusters of perfectionists: Two studies of emotional adjustment and academic achievement. *Measurement and Evaluation in Counseling and Development*, 35, 35-48.
23. Sellars, P. A., Evans, L. & Thomas, O. (2016). The Effects of Perfectionism in Elite Sport:
24. Experiences of Unhealthy Perfectionists. *The Sport Psychologist*, 30, 219-230. Doi: 10.1123/tsp.2014-0072
25. Stoeber, J. (2012). Perfectionism and performance. In S. M. Murphy (Ed.), *The Oxford handbook of sport and performance psychology* (pp. 294-306). New York: Oxford University Press.
26. Stoeber, J., & Becker, C. (2008). Perfectionism, achievement motives, and attribution of success and failure in female soccer players. *International Journal of Psychology*, 43 (6), 980-987.
27. Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10, 295-319.
28. Stoeber, J., & Rambow, A. (2007). Perfectionism in adolescent school students: Relations with motivation, achievement, and well-being. *Personality and Individual Differences*, 42, 1379-1389.
29. Stoeber, J., Stoll, O., Salmi, O., & Tiikkaja, J. (2008). Perfectionism and achievement goals in young Finnish ice-hockey players aspiring to make the Under-16 national team. *Journal of Sport Sciences*, 1-10, iFirst article.
30. Stoeber, J., Uphill, M. A., & Hotham, S. (2009). Predicting race performance in triathlon: The role of perfectionism, achievement goals, and personal goal setting. *Journal of Sport and Exercise Psychology*, 31, 2, 211-245.
31. Stoll, O., Lau, A., & Stoeber, J. (2008). Perfectionism and performance in a new basketball training task: Does striving for perfection enhance or undermine performance. *Psychology of Sport and Exercise*, 9, 620-629. Doi: 10.1016/j.psychsport.2007.10.001
32. Williams, A. M., & Hodges, N. J. (2005). Practice, instruction and skill acquisition in soccer: challenging tradition. *Journal of Sports Sciences*, 23, 6, 637-650.