Perfect Riders: Personality, Perfectionism, and Mental Health in Norwegian Competition Riders

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1. Introduction

Competition riding is different from most other sports, as it depends on a partnership between the horse and the rider and demands mutual respect, trust, and close communication between the parties [1,2]. The interaction between humans and horses is related to positive emotions and self-efficacy [3,4]. In this study, positive emotions and self-efficacy will be defined as aspects of good mental health [5–7]. Within sports, however, one may not be particularly interested in mental health per se but of mental health as a source of good performances. In this sense, positive emotions and self-efficacy can serve as important sources for further activity and development as a rider. This may also be valid for other groups of athletes.

To attend and win in competitions, the individual needs a driving force for perfectionism and the willingness to work. Perfectionism can be defined as the striving to be flawless or the need to become perfect [8,9]. In riding, the rider and horse work together as a team to achieve this goal [10]. Thus, a top athlete in equestrian sport should have a certain amount of perfectionism.

Too much perfectionism, however, can cause the individual to never be satisfied with own achievements and not experience positive emotions like enjoyment [11–13]. Hewitt and Flett [9,14] identified the two dimensions of perfectionism called self-oriented perfectionism (inner motivation for perfectionism) and socially prescribed perfectionism (external motivation for perfectionism). These two types of perfectionism may be linked to “intrinsic motivation” and “extrinsic motivation” [15]. A person who scores high on self-oriented perfectionism will strive for accomplishments for his/her own sake, whereas a person who scores high on socially prescribed perfectionism will strive to satisfy others [16].

Research has shown that perfectionism can be both positive or healthy and negative or unhealthy and that certain personality traits may be of importance in this respect [17]. The Big Five Model of personality is well established and consists of five stable trait dimensions: agreeableness, conscientiousness, extraversion, neuroticism, and openness [17,18]. Self-oriented perfectionism has been associated with conscientiousness and socially oriented perfectionism with neuroticism [17]. Some findings suggest that neuroticism in combination with socially oriented perfectionism may be unhealthy with regard to self-efficacy, joy and happiness, and interest and engagement in life [11,13,19–22]. Other findings suggest that self-oriented perfectionism may be unhealthy, for example, related to eating disorders, anxiety, and depression [11,23].

Too much perfectionism can be both positive or healthy and negative or unhealthy and that certain personality traits may be of importance in this respect [17]. The Big Five Model of personality is well established and consists of five stable trait dimensions: agreeableness, conscientiousness, extraversion, neuroticism, and openness [17,18]. Self-oriented perfectionism has been associated with conscientiousness and socially oriented perfectionism with neuroticism [17]. Some findings suggest that neuroticism in combination with socially oriented perfectionism may be unhealthy with regard to self-efficacy, joy and happiness, and interest and engagement in life [11,13,19–22]. Other findings suggest that self-oriented perfectionism may be unhealthy, for example, related to eating disorders, anxiety, and depression [11,23].

The findings indicate that self-oriented perfectionism may have a positive effect on the mental health of the riders. The high degree of conscientiousness may be of importance in this respect [17]. The Big Five Model of personality is well established and consists of five stable trait dimensions: agreeableness, conscientiousness, extraversion, neuroticism, and openness [17,18]. Self-oriented perfectionism has been associated with conscientiousness and socially oriented perfectionism with neuroticism [17]. Some findings suggest that neuroticism in combination with socially oriented perfectionism may be unhealthy with regard to self-efficacy, joy and happiness, and interest and engagement in life [11,13,19–22]. Other findings suggest that self-oriented perfectionism may be unhealthy, for example, related to eating disorders, anxiety, and depression [11,23].

To the best of our knowledge, the relationship between personality traits, perfectionism, and mental health among...
competition riders has not previously been studied. The purpose of the present study was to investigate these interrelations. What is the relationship between the rider’s personality, perfectionism orientation, and mental health in terms of self-efficacy and the experience of the positive emotions, enjoyment, and interest? Based on the previous literature on these relationships, which will be outlined below, a conceptual model to illustrate the direct and indirect paths influencing mental health was constructed (Fig. 1).

In the conceptual model, personality and perfectionism are seen as directly related to mental health. Furthermore, personality is seen as influencing mental health indirectly through perfectionism. In this study, self-oriented and socially prescribed perfectionism will be included as mediating variables between the Big Five traits and the mental health indicators. The conceptual model should be understood as a way to organize the empirical analysis. The reasons for postulating this model and proposed hypotheses are outlined below.

1.1. The Association Between Personality and Perfectionism

To start explaining the mechanism underlying the conceptual model, some notes on the relationship between personality and perfectionism will be made. Self-oriented perfectionism has been associated with high conscientiousness, which is a desired quality in an athlete [17,24–27]. Self-oriented perfectionism has also been associated with low score on agreeableness [28] and high score on neuroticism [12,27–32]. However, other studies found no relationship between self-oriented perfectionism and agreeableness [27,33], extraversion [17], or neuroticism [26,28]. Socially oriented perfectionism has been associated with high degree of neuroticism [30,34], low extraversion [28,31,35], and agreeableness [26]. Although not strongly, socially oriented perfectionism has also been associated with conscientiousness [9,31] and openness [28]. Most studies found no relationship between socially oriented perfectionism and conscientiousness [26,33], openness [9,26,27], extraversion [9,27,33], or agreeableness [9]. Interestingly, previous research has found that neuroticism is associated with both self-oriented perfectionism [27,29–32,36], and socially prescribed perfectionism [17,30–34,37]. This may indicate that socially prescribed perfectionism can be a neurotic form of perfectionism [38]. On the background of previous research, we will postulate that, in direct paths:

Hypothesis 1: Competition riders who score high on conscientiousness and neuroticism will score high on self-oriented perfectionism.

Hypothesis 2: Competition riders who score high on neuroticism will score high on socially oriented perfectionism.

1.2. The Association Between Personality, Perfectionism, and Self-Efficacy

Horseback riding has been shown to be related to autonomy, self-efficacy, self-esteem, problem solving, leadership, and control [3,4,39–43]. Self-efficacy describes the individual’s beliefs in his or her ability to act in specific situations to reach a specific goal [44–47]. It has been reported that people who interact with horses experience a feeling of mastering and gain more faith in future success [48], which indicates that interacting tasks with horses can increase self-efficacy on specific areas [49]. This should also imply that perfectionism will be associated with self-efficacy. According to Tøraaen et al. [1], having confidence in, and being in harmony with, the horse may increase self-efficacy in riders. Norwegian female riders on all levels of competence have shown a high level of self-efficacy [150]. In a study among British competition riders, a conscientious personality was associated with motivation and achievement and neurotic personality with low self-efficacy [10]. This leads us to hypothesize that in direct paths:

Hypothesis 3: Competition riders who score high on conscientiousness, low on neuroticism, high on self-oriented perfectionism, and low on socially oriented perfectionism will score high on self-efficacy.

Hypothesis 4: Conscientiousness and neuroticism will influence self-efficacy positively through self-oriented perfectionism. Neuroticism will influence self-efficacy negatively through socially oriented perfectionism.

1.3. The Association Between Personality, Perfectionism, and Positive Emotions

A number of studies indicate that interaction with horses is associated with positive emotions [3,4,41–43,49,51,52]. Izard et al [53] have revealed 12 basic emotions: interest, enjoyment, surprise, sadness, anger, disgust, contempt, fear, guilt, shame, shyness, and hostility inward. Interest and enjoyment are categorized as positive emotions and serve to reduce negative emotions [6,7]. Research has shown a relationship between enjoyment and factors associated with better mental health [6,7], such as reducing the effect of negative experiences, and promote motivation to establish social relations in life [6]. Interest refers to finding one’s doing interesting, engaging and to being observant, curious, or expectant toward something [53]. Interest is important for developing cognitive skills and maintaining creativity, which may play an important role in handling new experiences and changes in life [7]. Enjoyment relates to the concept hedonic well-being, whereas interest relates to eudemonic well-being [54]. Basic emotions are related to personality traits [53,55]. A strong and positive relationship between positive emotions and extraversion has been found [55–58], as well as with conscientiousness, openness, and agreeableness [24,37,57]. Furthermore, a relationship between negative emotions and neuroticism has been found [53,59–65]. This leads us to hypothesize that:

Hypothesis 5: In direct paths, competition riders who score high on extraversion, conscientiousness, openness, and agreeableness and low on neuroticism, will score high on positive emotions. Likewise, riders who are high on self-oriented perfection and low on socially oriented perfectionism are likely to score higher on positive emotions.

As for self-efficacy, it is reason to assume that perfectionism will be associated with positive emotions such as interest and enjoyment. Thus, the personality of competition riders will influence interest and enjoyment in indirect paths through perfectionism.

Hypothesis 6: In indirect paths, extraversion, conscientiousness, openness, and agreeableness will influence positive emotions through self-oriented perfectionism. Neuroticism will influence positive emotions negatively through socially oriented perfectionism and positively through self-oriented perfectionism.
When collecting the data, no IP addresses were recorded. The first page of the questionnaire provided the respondent with basic information about the study. The respondents were informed about the purpose of the study, what the data would be used for, and that the data would be confidential and anonymous. Participants were asked to confirm that they were aged 16 years or older and to provide informed consent. The study was approved by the Norwegian Social Science Data Services.

As regards the sociodemographic characteristics of the sample, nearly all the riders were female (95.5%). The mean age of the riders was 41.2 years (median = 40.0 years; SD = 8.3; range = 16–69 years) and male riders (mean = 46.8 years, SD = 9.9) were significantly older than female riders (mean = 41.0 years, SD = 8.2; P < .001). Regarding the highest level of education, 40% reported primary school, 29.1% high school education, and 66.9% university level. Seventy-three percent of the riders were married or cohabiting. Most of the participants were in paid employment (86.5%). Sixty-three percent reported no health problems, 31.1% had some kind of somatic problem (most often musculoskeletal problems), 2.1% had psychological problems, and 3.1% reported a combination of somatic and psychological problems.

2. Methods

From October to December 2013, an online questionnaire survey of 5,360 licensed horseback riders, registered in the Norwegian Equestrian Federation (NEF), and with an e-mail address, was carried out. The survey focused on health issues, such as life satisfaction, self-efficacy, and resilience. The NEF has 36,000 members, organized in terms of 380 clubs active within the equestrian disciplines of dressage, driving, endurance, eventing, showjumping, and vaulting, including paraequestrian dressage and driving. However, the invitation was only sent to those currently licensed, that is, those individuals who had been or were competing in some equestrian discipline during the competition year 2013. The University of Oslo was responsible for the scientific part of the study.

Using their membership register, the NEF sent out information about the study and an invitation to participate by e-mail. By clicking on a link in the e-mail, the respondent was directed to the questionnaire on a commercial site hosting the survey (www.surveymonkey.no). Of the riders who received the invitation to participate, 662 individuals who accessed the survey site completed the questionnaire, yielding a response rate of 12.4%. We should note that the number of incorrect or out-of-use e-mail addresses is not known; thus, the response rate presented must be interpreted as the lowest likely response rate.

The questionnaire contained 125 items and took approximately 20 minutes to complete. In addition to social background variables, the questionnaire contained scales that had been previously tested and possessed good psychometric qualities such as the generalized self-efficacy scale (GSE) [46,47] and a 20-question version of the Big Five personality trait measure [66].

Table 1
Mean scores on the variables for personality, perfectionism, and mental health among Norwegian competition riders (means, standard deviation, and range).

| Variables            | n  | Mean | SD  | Range |
|----------------------|----|------|-----|-------|
| Personality          |    |      |     |       |
| Agreeableness        | 513| 5.39 | 0.94| 2.00–7.00 |
| Conscientiousness    | 513| 5.48 | 0.96| 1.25–7.00 |
| Extraversion         | 513| 5.34 | 1.25| 1.00–7.00 |
| Neuroticism          | 513| 2.89 | 1.23| 1.00–7.00 |
| Openness             | 513| 4.69 | 1.25| 1.25–7.00 |
| Perfectionism        |    |      |     |       |
| Self-oriented        | 484| 4.21 | 0.72| 1.50–6.60 |
| Socially prescribed  | 484| 3.63 | 0.63| 1.40–6.00 |
| Mental health        |    |      |     |       |
| Self-efficacy        | 517| 3.31 | 0.41| 1.90–4.00 |
| Interest             | 625| 3.86 | 0.70| 2.00–5.00 |
| Enjoyment            | 625| 3.82 | 0.70| 1.33–5.00 |

2.1. Measures

Perfectionism—Hewitt et al.’s scales [66] for self-oriented perfectionism (15 items) and socially prescribed perfectionism (15 items) were applied. Each of the items was evaluated on a scale from 1 = completely disagree to 7 = completely agree. Two new mean sum score variables were constructed (Cronbach’s alpha = .87 for self-oriented perfectionism and .79 for socially prescribed perfectionism). High score indicates high degree of perfectionism.

Personality was measured by a 20-item Norwegian version of the Big Five Inventory [67–69]. The items were evaluated on a 7-point scale, from 1 = strongly disagree to 7 = strongly agree. The Big Five Inventory measures five different personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Cronbach’s alpha for each of the traits was as follows: .83 (extraversion), .53 (agreeableness), .61 (conscientiousness), .75 (neuroticism), and .68 (openness).

Self-efficacy was measured by the 10-item GSE [46,47] and computed as a mean sum score variable (Cronbach’s alpha = .89). The GSE includes items such as “I can always manage to solve difficult problems if I try hard enough,” and “I am confident that I could deal efficiently with unexpected events,” with response options ranging from 1 = not at all true to 4 = exactly true. High score indicates high degree of self-efficacy.

Interest and enjoyment—Six items derived from the differential emotions scale [53] were used. The following question introduced

Table 2
The correlation between the different dimensions of personality and perfectionism and three indicators of mental health (n = 481).

| Variables            | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
|----------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Personality          |    |     |     |     |     |     |     |     |     |
| 1 Agreeableness      | —  |     |     |     |     |     |     |     |     |
| 2 Conscientiousness  | 0.28*** | —   |     |     |     |     |     |     |
| 3 Extraversion       | 0.27*** | 0.07 | —   |     |     |     |     |     |
| 4 Neuroticism        | -0.23*** | -0.18*** | -0.40*** | —   |     |     |     |     |
| 5 Openness           | 0.01 | -0.06 | 0.24*** | -0.17*** | —   |     |     |     |
| Perfectionism        |    |     |     |     |     |     |     |     |     |
| 6 Self-oriented      | -0.02 | 0.12*** | -0.06 | 0.22*** | -0.03 | —   |     |     |
| 7 Socially prescribed| -0.07 | -0.10  | 0.17*** | 0.33*** | -0.11  | 0.46*** | —   |     |
| Mental health        |    |     |     |     |     |     |     |     |     |
| 8 Self-efficacy      | 0.12**  | 0.24*** | 0.28*** | -0.55*** | 0.27***  | 0.06  | -0.17*** | —   |     |
| 9 Interest           | 0.09  | 0.10  | 0.14**  | -0.30 | 0.19**  | 0.02  | -0.14**  | 0.28*** | —   |
| 10 Enjoyment         | 0.14**  | 0.11  | 0.25*** | -0.45*** | 0.17***  | -0.11  | -0.16**  | 0.31*** | 0.58*** |

*P < .05.
**P < .01.
***P < .001.
the items “How often have you experienced any of the following during the last two weeks?” The response categories were 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often. Two mean sum score variables were constructed (Cronbach’s alpha = 0.83 for enjoyment and 0.83 for interest). High score indicates high degree of interest and enjoyment.

2.2. Statistical Analysis

The relationship between the mental health variables, perfectionism, and personality was studied using multiple linear regression analysis [70]. First, the personality variables were entered into the analysis with self-oriented and socially oriented perfectionism as outcome variables. Second, the personality variables and the perfectionism variables served as predictors to predict self-efficacy and positive emotions. All statistical analyses were conducted with SPSS Statistics 24.

3. Results

Table 1 shows the mean scores, standard deviations, and ranges for all variables included in the analyses. The riders scored relatively high on all variables except neuroticism and socially prescribed perfectionism.

As shown in Table 2, the strongest correlations were found between interest and enjoyment (r = 0.58), neuroticism and general self-efficacy (r = –0.55), self-oriented perfectionism and socially prescribed perfectionism (r = 0.46), neuroticism and enjoyment (r = –0.45), neuroticism and extraversion (r = –0.40), socially prescribed perfectionism and neuroticism (r = 0.33), and enjoyment and self-efficacy (r = 0.31).

Table 3
Step 1: The relationship between personality and perfectionism among Norwegian competition riders (multiple, linear regression analysis, standardized regression coefficients β).

| Variables                  | Self-oriented (n = 484) | Socially prescribed (n = 483) |
|----------------------------|-------------------------|-----------------------------|
| Personality                |                         |                             |
| Agreeableness              | –0.02                   | 0.02                        |
| Conscientiousness          | 0.17***                 | –0.06                       |
| Extraversion               | 0.03                    | –0.03                       |
| Neuroticism                | 0.25**                  | 0.30*                       |
| Openness                   | 0.01                    | –0.07                       |

*P < .05.
**P < .01.
***P < .001.

Multiple linear regression analyses were carried out in two steps. In step 1, the relationship between personality and perfectionism was studied (Table 3). There was a statistically significant relationship between conscientiousness (β = 0.17) and neuroticism (β = 0.25) and self-oriented perfectionism. There was a statistically significant relationship between neuroticism and socially prescribed perfectionism (β = 0.30). Riders who scored high on conscientiousness were more self-oriented perfectionistic than others, and riders who were high on neuroticism were both more self-oriented and socially prescribed perfectionistic than others.

In step 2, the relationship between personality, perfectionism, and the three indicators of mental health was investigated (Table 4). Neuroticism (β = –0.51), conscientiousness (β = 0.15), openness (β = 0.19), and self-oriented perfectionism (β = 0.18) significantly predicted self-efficacy. Riders who were low on neuroticism and high on conscientiousness, openness, and self-oriented perfectionism had higher self-efficacy than others.

Interest had a statistically significant relationship with neuroticism (β = –0.26), openness (β = 0.14), and self-oriented perfectionism (β = 0.11). Riders who were low on neuroticism and high on openness and self-oriented perfectionism reported more interest than others.

There was a statistically significant relationship between enjoyment and neuroticism (β = –0.40) and openness (β = 0.09). Riders who were low on neuroticism and high on openness reported more enjoyment than others.

In this article, a conceptual model to illustrate the processes that may result in good mental health was proposed (see Fig. 1). In this model, self-oriented and socially prescribed perfectionism were included as mediating variables between the five dimensions of personality trait and the mental health indicators. The results presented in Tables 3 and 4 can be used to visualize the conceptual model. It should be emphasized that this type of analysis should not be understood as an empirical test of the model but as a way to organize the empirical analysis. As described by Duncan [71], the direct effects of personality and perfectionism on the mental health variable are estimated as presented in Table 4. Furthermore, the indirect effects of personality on mental health is the product of the effect of personality on perfectionism (see Table 3) multiplied with the effect of perfectionism on the mental health indicator. Figs. 2–4 sum up the results for self-efficacy, interest, and enjoyment. For clarity, only the statistically significant relationships are shown in the figures, and the strongest relationships are shown with the thickest arrows.

As shown in Fig. 2, conscientiousness, neuroticism, openness, and self-oriented perfectionism influenced general self-efficacy in four direct processes. Self-oriented perfectionism served as a mediating variable between conscientiousness and neuroticism and self-efficacy in two indirect processes. The most important paths to high self-efficacy were a direct effect of neuroticism and an indirect effect of neuroticism via self-oriented perfectionism. Riders who were high on neuroticism had less self-efficacy. At the same time, riders who were high on neuroticism were high on self-oriented perfectionism, which in turn was associated with higher

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Table 4
Step 2: The relationship between personality, perfectionism, and mental health indicators among Norwegian competition riders (multiple, linear regression analysis, standardized regression coefficients β).

| Predictors               | Self-efficacy (n = 482) | Interest (n = 482) | Enjoyment (n = 482) |
|--------------------------|-------------------------|-------------------|---------------------|
| Personality              |                         |                   |                     |
| Agreeableness            | –0.05                   | 0.02              | 0.02                |
| Conscientiousness        | 0.15***                 | 0.04              | 0.04                |
| Extraversion             | 0.04                    | –0.01             | 0.06                |
| Neuroticism              | –0.51***                | –0.26*            | –0.40***            |
| Openness                 | 0.15***                 | 0.14*             | 0.09                |
| Perfectionism            |                         |                   |                     |
| Self-oriented            | 0.18***                 | 0.11              | –0.03               |
| Socially prescribed      | –0.04                   | –0.08             | 0.01                |

*P < .05.
**P < .01.
***P < .001.

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Fig. 1. A conceptual model for the relationship between personality, perfectionism, and indicators of mental health among Norwegian competition riders.
self-efficacy. This indicates that neuroticism has a negative direct effect on self-efficacy but also a positive indirect effect through self-oriented perfectionism. Conscientiousness, neuroticism, openness, and self-oriented perfectionism influenced interest in three direct and two indirect processes (Fig. 3). Self-oriented perfectionism served as a mediating variable between conscientiousness and neuroticism and interest in two indirect processes. The most important paths for high interest were directly from (low) neuroticism and indirectly via self-oriented perfectionism. This means that riders who were high on neuroticism have less interest. On the other hand, those who were high on neuroticism also scored high on self-oriented perfectionism, which means showing more interest. This indicates that neuroticism has a mixed influence on interest, partly mediated by self-oriented perfectionism.

Only neuroticism and openness influenced enjoyment in two different direct processes (Fig. 4). The most important path was from neuroticism to enjoyment. The result indicates that riders with a neurotic personality trait feel less joyful.

4. Discussion

The purpose of this study was to investigate the relationship between personality, perfectionism, and mental health in Norwegian competition riders. Overall, the participants had relatively good mental health, which is in accordance with previous studies [3,4,24,26–43,50,51,72,73]. Regarding self-efficacy, the analyses showed that the riders scored above average [47]. This is in accordance with previous research among riders [1,49,50]. That the competitors scored high on interest and enjoyment is also in line with previous research that has shown that being with horses has a relationship with positive emotions [3,4,41–43,49,51]. Six hypotheses were put forward on the relationship between personality, perfectionism, and the mental health-related outcomes. We found that competition riders who scored high on conscientiousness and neuroticism scored high on self-oriented perfectionism, and riders who scored high on neuroticism scored high on socially oriented perfectionism. In addition, riders who scored high on conscientiousness and low on neuroticism, and high on self-oriented perfectionism, scored high on self-efficacy. Conscientiousness and neuroticism influenced self-efficacy through self-oriented perfectionism. Regarding positive emotions, riders who scored high on openness, and low on neuroticism, scored high on positive emotions. Riders who scored high on self-oriented perfection scored higher on interest. Finally, conscientiousness and neuroticism influenced interest through self-oriented perfectionism.

We found that competition riders who scored high on conscientiousness and neuroticism scored high on self-oriented perfectionism, and riders who scored high on neuroticism scored high on socially oriented perfectionism, giving support to hypotheses 1 and
2. When riders who scored high on conscientiousness also scored high on self-oriented perfectionism, this indicates that these riders are organized, accurate, targeted, responsible, effective, and self-disciplined [17]. A finding well documented earlier [14,17,24–27,31]. However, competition riders who scored high on neuroticism also scored high on both self-oriented and socially prescribed perfectionism. In the previous literature, self-oriented perfectionism is shown to be associated with conscientiousness [14,17,24–27,31], but some studies have also found an association with neuroticism [17,29–33,74]. However, there are also studies that did not find any relationship between self-oriented perfectionism and neuroticism [14,26,75]. This indicates that self-oriented perfectionism may contain neurotic tendencies but to a much lesser degree than socially prescribed perfectionism [17]. The finding supports Hewitt, Flett, and Mikail [36] who have argued that perfectionism is mainly negative but that competitors can develop strategies to deal with perfectionism in a way that gives positive outcomes in sports. This may be one of the mechanisms behind the finding that riders who scored high on conscientiousness, low on neuroticism, and high on self-oriented perfectionism, scored high on self-efficacy. Conscientiousness and neuroticism influenced self-efficacy through self-oriented perfectionism. This gives support to Hypothesis 3 and Hypothesis 4. When it comes to self-efficacy, the high expectations that perfectionists put on themselves to perform may promote their achievements, which may contribute to higher self-efficacy [21,76–78].

Regarding positive emotions, we found that riders who scored high on openness, and low on neuroticism, scored high on positive emotions. Riders who scored high on self-oriented perfection scored higher on interest but were insignificant for enjoyment. Furthermore, conscientiousness and neuroticism influenced interest through self-oriented perfectionism, and riders who scored high on openness and low on neuroticism scored higher on interest and enjoyment than other riders. Izard et al. [53] found that interest and enjoyment predicted low score on the personality trait neuroticism, whereas negative emotions such as fear or shame were associated with high score on neuroticism. Persons who score high on neuroticism may have a lower threshold for experiencing negative emotions in situations that are stressful, challenging, or frustrating [6,7,53,55]. Studies have also shown a relationship between neuroticism and negative emotions, extraversion and positive emotions, and well-being [18,79]. Avia [56] found a relationship between extraversion and positive emotions. In addition, research on well-being has shown a relationship between extraversion and happiness or enjoyment [57,58]. Agreeableness, conscientiousness and openness [80], and extraversion and conscientiousness [46] are also shown to be associated with positive emotions. However, this study does not give support to a relationship between agreeableness and extraversion and positive emotions.

Competition riders in this study who scored high on self-oriented perfectionism scored higher on interest than other competition riders, supporting Hypothesis 5 and Hypothesis 6 for the positive emotion interest. That self-oriented perfectionism is related to positive emotions is also in accordance with previous findings [21,31,75–85]. However, it is interesting that different predictors are associated with the two types of positive emotions measured in this study. This means that positive emotions imply different things, and it is important to differentiate between them, as done in this study. When socially prescribed perfectionism was not associated with positive emotions, this supports the claim that perfectionism should be divided into a normal and a neurotic form [38,53]. In addition, Lo and Abbott [21] have argued that self-oriented perfectionism is a positive type of perfectionism, whereas socially prescribed perfectionism is a neurotic type of perfectionism, and several studies have also supported this statement [21,86–90].

4.1. On the Mediating Role of Perfectionism

The analysis showed that self-oriented perfectionism mediated the relationship between conscientiousness and self-efficacy. The finding is not unexpected, as riders who score high on self-oriented perfectionism have been characterized as organized, accurate, and targeted [17,26,27,31], properties also found in a conscientiousness personality trait [17,24–27].

The analysis also showed that self-oriented perfectionism counteracted the negative relationship between neuroticism and self-efficacy and between neuroticism and interest. Self-oriented perfectionism has been shown to be associated with both good mental health [31,75–77,81,82] and poor mental health [11-13,20,23,81,83,87–89,91–94]. Therefore, it was not unexpected that self-oriented perfectionism played a role in a positive pathway between neuroticism and mental health. Self-oriented perfectionism has characteristics such as setting high standards for oneself and then systematically working to achieve these goals [16,21]. In addition, Mallinger [95] has claimed that perfectionists have a strong need for control. Having control of their surroundings can reduce the effect of having a neurotic personality on mental health. There are characteristics that can help individuals experience less...
nervousness, concern, and uncertainty [18,28,96]. Thus, the properties found in self-oriented perfectionism can help reduce some of the effect of neuroticism may have on mental health among Norwegian competition riders [14].

Several studies contradict existing findings [25,96,97]. For instance, Molnar et al [31] found a relationship between self-oriented perfectionism and poor mental health after controlling for the effect of neuroticism. Smith et al [32] found that individuals who are highly perfectionistic strive and are only satisfied if they reach their goals. If they do not live up to their expectations, this may cause them poorer mental health [32].

The finding that socially prescribed perfectionism was not related to self-efficacy, interest, and enjoyment in the riders is in accordance with the findings by Capan [98], Onwuegbuzie [89], and Stornelli et al [90] but contradicts Hart et al’s [100] finding on relationship with self-efficacy. However, the finding is somewhat surprising considering that a number of previous studies have found a relationship between neuroticism, socially prescribed perfectionism, and poor mental health [29,33,101]. However, contrary to previous studies, perfectionism was included as a mediating variable between personality and mental health in this study. As socially prescribed perfectionism had no role as mediator in the relationship between neuroticism and mental health; this indicates that socially prescribed perfectionism is not merely a by-product of neuroticism, as other studies have claimed [30,34]. Another possible reason why no relationship between socially prescribed perfectionism and mental health was found could be that the sample of competition riders stand out compared with the samples of university students in other studies [75,83].

4.2. Strengths and Limitations

A strength of the present study was the use valid scales with good psychometric qualities. However, some limitations should also be addressed. For one, the cross-sectional research design does allow for conclusions about causality. Second, the data in this study were collected using questionnaires and self-reporting. Despite the fact that a great deal of literature based on perfectionism is based on self-reporting, it may be problematic as part of the perfectionism phenomenon implies a need to conceal that one is not perfect to others (self-presentation bias) [32]. Third, the low response rates may represent a problem for the generalizability of the results. On the other hand, simulation studies have shown that associations are not particularly influenced by selective dropout [102].

5. Conclusions

The present study shed light on the role of perfectionism in the relationship between personality and mental health among competition riders. The findings indicate that self-oriented perfectionism may have a positive influence on mental health. This result may also be valid for other groups of athletes.

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