assess levels of somatic anxiety, cognitive anxiety and self-confidence. In order to test equine obedience, horse-rider combinations were required to negotiate an “obstacle course” in-hand comprising 5 different obedience tasks. Horses were scored by the researchers on a 4-point Likert scale for each task depending on their level of obedience. Rider-horse combinations then participated in a 6-week structured groundwork training program aimed at improving horse-rider communication. Riders were taught how to give effective aids based on principles of negative and positive reinforcement thereby improving obedience of the horse. At the end of the intervention riders were once again required to complete the WAI-S and complete another obstacle course in-hand, featuring the same tasks but in a different order. Equine obedience scores as well as pre-and post anxiety and self-confidence scores were tested for significant differences using Wilcoxon Signed Ranks tests. Findings revealed a significant decrease in somatic anxiety scores pre-and post intervention (mean somatic anxiety scores: 6.32 vs. 4.96; Z = –3.36; p < 0.001). Horse-rider combinations also scored significantly higher on obedience scores following the training program (mean obedience scores: 23 vs. 24; Z = –3.5; p < 0.001). A positive trend was seen for levels of self-confidence pre-and post intervention (mean self-confidence scores: 11.1 vs. 11.8; Z = –1.89; p > 0.05), yet no statistically significant difference could be found for cognitive anxiety. Results suggest that following the training program, riders may have felt more in control of their immediate environment, including their horses. This in turn may have had a positive effect on levels of physical tension and feelings of self-confidence. Practical implications are that ground work training based on principles of positive and negative reinforcement are likely to have a beneficial effect on horse-rider communication, improving obedience in the horse under-saddle and in-hand and increasing physical relaxation and feelings of self-confidence in the rider.

Key words: equine obedience; horse-rider communication

INVESTIGATING DIFFERENCES IN SELF-REGULATION BETWEEN NOVICE, INTERMEDIATE AND ADVANCED EQUESTRIAN RIDERS

I.A. Wolfram1*, J. Foshag1, C. Kobbe2
1University of Applied Sciences Van Hall Larenstein, Wageningen, The Netherlands
*Corresponding author: inga.wolfram@wur.nl

Research into a wide variety of sports has shown that appropriate levels of self-regulation, e.g. an athlete’s ability to regulate cognitive, emotive and motivational processes, can help improve performance. Anecdotal evidence suggests that communication and performance of the horse-rider dyad may be improved if the rider is able to monitor and control his own cognitions, emotions and levels of motivation. The current study aims to investigate differences in self-regulatory skills in the equestrian population. The 60-item German ‘Volitionale Komponenten im Sport’ inventory (VKS; volitional components in sport) examines four dimensions of self-regulatory skills, including self-optimisation, self-blocking, activation default and loss of focus. The VKS was distributed via email to 285 German riders (mean age 24.46 ± 5.61; 246 female, mean age 23.86 ± 4.64; 46 male, mean age 28.21 ± 8.81). Participants were divided into novice (N = 122), intermediate (N = 135) and advanced riders (N = 28), depending on their competitive level. Novice riders were defined as competing at the German performance level ‘Leistungsklasse’ (LK) 0 or LK6, intermediate riders at LK 5, 4 or 3, and advanced riders at LK 2 or 1. Two-way between-subjects MANOVA tests were used to examine competence-by-gender interactions in VKS scores. Post hoc analysis was conducted independently for each VKS subscale using one-way univariate ANOVA tests. An alpha level of 0.05 was used to indicate statistical significance and partial eta squared effect sizes (partial $\eta^2$) were calculated for significant results. No significant interactive effect between gender and competence was found ($F_{8,554} = .83; p > 0.05$), nor was there a main effect for gender ($F_{4,276} = 1.4; p > 0.05$). A significant main effect was found for competence levels ($F_{8,554} = 2.39; p < 0.05$), however, the effect size was relatively small (partial $\eta^2 = .03$). Post-hoc comparisons revealed significantly higher self-optimisation scores in intermediate than in novice riders (63.6 ± 11.1 vs. 59.8 ± 12; p < 0.05). Activation default scores were found to be significantly lower in intermediate than in novice riders (5.4 ± 4.4 vs. 7.5 ± 5; p < 0.05). Lastly, loss of focus scores were also significantly lower in intermediate than in novice riders (3.9 ± 3.6 vs. 5.3 ± 4.1; p < 0.05). Findings suggest that novice riders possess comparatively fewer self-regulatory skills than intermediate riders. Surprisingly, advanced riders did not score significantly differently to novice or intermediate riders. However, this may have been due to comparatively small numbers of advanced riders participating in the study. Practical implications are that in addition to developing skills related to equitation, novice riders should work on their ability to remain motivated and focused while riding. Equitation instructors may also want to expand their own knowledge base regarding self-regulatory processes in order to be able to provide appropriate support to riders.

Key words: equestrian rider; self-regulation; equine performance

THE EFFECT OF MENTAL SKILLS TRAINING ON NON-ELITE DRESSAGE PERFORMANCE

I.A. Wolfram1*, D. Micklewright2
1University of Applied Sciences Van Hall Larenstein, Wageningen, The Netherlands
2University of Essex, Colchester, UK
*Corresponding author: inga.wolfram@wur.nl

Despite substantial evidence concerning the effectiveness of mental skills training in sports performance, only a limited
number of studies have investigated their effect in equestrian sports. The aims of the current study were to identify differences in mental skills between elite and non-elite riders and to investigate the effects of a mental skills training program on ridden performance in non-elite riders. For the first part of the study, 4 elite and 4 non-elite riders were recruited for semi-structured interviews on the type of mental skills they used in preparation for a competitive event. Interviews were transcribed verbatim and then examined for differences or common themes. Mental preparation skills used by elite riders but absent in preparation routines of non-elite riders were used as a basis to devise a mental training intervention program. The intervention comprised of an initial meeting introducing sport psychology in equestrian sports, followed by 5 sessions covering goal-setting, relaxation techniques, self-talk, concentration training and imagery. For the second part of the study, 10 Dutch non-elite dressage riders (mean age 23.3 ± 2.8) competing from novice to advanced-medium level were recruited. All riders were used as their own controls and were required to ride in three dressage competitions in their region and at their competitive level. Competitions were judged by appropriately qualified judges from the Dutch National Equestrian Federation. Riders had to participate in an initial competition approximately 6–8 weeks prior to the study. All riders competed for the second time approximately 1-2 weeks prior to the intervention and a third, final time upon completion of the 6-week intervention training program. Dressage performance was measured in percentage points. For the duration of the intervention training program riders participated once a week in a 2-hour session covering each of the different mental training topics. A one-way repeated measures ANOVA revealed a significant effect for “time” between the three competitive results (Wilks’ Lambda = 0.42; F,2,8 = 5.5; p < 0.05). No significant difference was found between initial and pre-intervention dressage scores (p > 0.05). Post-hoc paired-samples t-tests showed that post-intervention performance scores (61.73 ± 3.07) were significantly higher than pre-intervention scores (58.2 ± 2.98; t0 = −3.43; p < 0.01). Findings suggest that mental skills training may have a positive effect on competitive dressage performance in non-elite riders, which may be due to improved horse-rider communication and interaction. Practical implications are that in addition to improving equitation skills riders and trainers should also work on relevant mental training techniques.

Key words: mental skills training; dressage performance; elite rider

Psychological skills have been shown to be of benefit in competitive performance in a wide variety of sports. However, only limited research exists investigating the use of psychological skills in equestrianism. The aim of the current study was to determine the use of psychological skills in the wider equestrian population. The short, German-language version of the Psychological Skills Inventory for Sport (15 items, PSIS-G15) examines five separate components of psychological skills, including (lack of) confidence, mental preparation, performance motivation, team emphasis and (lack of) task regulation. The PSIS-G15 was distributed via email to 285 German riders (mean age 24.46 ± 5.61; 246 female, mean age 23.86 ± 4.64; 46 male, mean age 28.21 ± 8.81). Participants were divided into novice (N = 122), intermediate (N = 135) and advanced riders (N = 28), depending on their competitive level (German “Leistungsklasse”). Novice riders were defined as holding LK0 or LK6, intermediate riders having gained LK 5, 4 or 3, and advanced riders holding LK 2 or 1. Data were examined for statistical differences in the use of psychological skills between competitive levels and according to gender within those levels. One-Way ANOVA tests revealed statistically significant differences between competitive levels for mental preparation (F2,282 = 4.08; p < 0.05) and performance motivation (F2,282 = 5.4; p < 0.001). Post-hoc comparisons using the Tukey HSD test indicated that intermediate riders score significantly higher in mental preparation than novice riders (14.8 ± 2.3 vs. 14.1 ± 2.5; p < 0.05). The difference in mental preparation between advanced and novice riders was nearing significance (15.2 ± 1.7 vs. 14.1 ± 2.5; p > 0.05). For performance motivation, post-hoc tests revealed significant differences between intermediate and novice riders (12.3 ± 2.9 vs. 10.7 ± 2.8; p < 0.001). In intermediate riders a significant difference between female and male riders could be found for mental preparation (t113 = −1.66; p < 0.01; 14.9 ± 2.1 vs. 14.5 ± 3.4).

Findings indicate that both at advanced and intermediate level riders make greater use of mental preparation techniques, e.g. imagery or self-talk, to prepare for competition than novice riders. Intermediate riders also score higher on performance motivation than novice riders, indicating that they prioritise their sport above other things. Practical implications are that even at novice level more attention should be paid to teaching riders mental preparation strategies as an important prerequisite to progress through the competitive levels.

Key words: equestrianism; mental preparation; novice riders

THE USE OF PSYCHOLOGICAL SKILLS IN NOVICE, INTERMEDIATE AND ADVANCED EQUESTRIAN RIDERS

I.A. Wolframm*, J.S. Foshag, C. Kobbe
University of Applied Science, Van Hall Larenstein (Wageningen UR), Postbus 411 6700 AK Wageningen, NL
*Corresponding author: inga.wolframm@wur.nl

THE PRACTICAL APPLICATION OF DISMOUNTED EXERCISES TO IMPROVE THE SEAT OF RIDER’S

M. Zetterqvist Blokhuis*
Swedish University of Agricultural Sciences, Uppsala, Sweden
Present address: MZ EQUITATION, Skokloster, Sweden
*Corresponding author: maria@mzequitation.se