FACTA UNIVERSITATIS
Series: **Physical Education and Sport**, Vol. 22, No 3, 2024, pp. 125 - 134
https://doi.org/10.22190/FUPES231024012K

Research article

ATTITUDES ON GRADING OF PRE-SERVICE AND IN-SERVICE PHYSICAL EDUCATION TEACHERS

UDC 796.01.3

Rolf Kretschmann

FOM University of Applied Sciences, Germany

ORCID iD: Rolf Kretschmann https://orcid.org/0000-0002-3272-9213

Abstract. *Assessing and grading students' performance in class is an essential part of teaching as a profession. Compared to other classroom-based subjects, Physical Education (PE) teachers usually handle grading practices in the motor learning domain and in a gym-based environment (Rink, 2013). Pre-service and in-service teachers may have different views on handling grading in PE according to differences in teaching experience, and theoretical and practical knowledge (Alkharusi, Kazem, & Al-Musawai, 2011; Schempp et al., 1998). This study aims to investigate in-service PE teachers' (ISPET) perspectives of teaching practices in grading and compare them to the respective pre-service PE teachers' (PSPET) perspectives. To find a common set of teaching practices for grading in PE that fits knowledge and experience scopes of both in-service and pre-service PE teachers, essential aspects of grading were extracted out of systematic research on PE teachers' stress factors (König, 2004). Communicative and pragmatic validity of selected items were ensured by group discussion with selected pre-service and in-service PE teachers. 132 pre-service PE teachers and 134 in-service PE teachers were surveyed using a questionnaire consisting of personal data and previously developed items on teaching practices in grading. Results showed statistically significant differences in slightly more than a half of the respective attitudes on grading practices (e.g., "I assess and grade student performance frequently, because students learn well under pressure."). ANOVA showed significant differences regarding study/teaching experience in both groups in regard to some attitudes on grading. PE teacher education programs and PE teachers' continuing professional development may emphasize the change in teaching practices in grading to increase awareness.*

Key words: *grading, physical education, physical education teacher education, professional development, teacher education.*

Received October 24, 2023 / Accepted December 23, 2024
Corresponding author: Rolf Kretschmann
FOM University of Applied Sciences, Essen, Germany
E-mail: kretschmann.rolf@gmail.com

INTRODUCTION

A major and mandatory part of a teachers' job is giving grades. Assessing students' academic learning performance and "transferring" assessed data into actual grades is an essential task performed by teachers on a regular basis. Teachers may use given or self-generated rubrics, observations, portfolios, returned assignments and tests as well as careful considerations of student behaviour to generate grades (O'Connor, 2009). The grading progress follows three steps: 1) assessing particular student performance/ learning, 2) rating/evaluating particular student performance/learning, and 3) grading particular student performance/learning (Plake & Impara, 1997). What is special about physical education (PE), is that grading practices are handled predominantly in the (psycho-) motor domain and in a gym-based environment (Rink, 2013; Wuest & Fisette, 2015). This separates PE from the other school subjects that usually take place in regular classrooms. Research on an international scale shows that assessment and grading in PE predominantly focuses on Physical Fitness Tests (PFTs) and student characteristics such as effort (V. M. Loper-Pastor et al., 2013). Interestingly, grading and the grading process were found to be a striking stress factor in (German) PE teachers (König, 2004).

Consulting empirical evidence, major research findings suggest that teachers' attitudes strongly impact the respective teachers' learning and teaching practices (Fang, 1996; Nordlöf, Höst, & Hallström, 2017). For instance, in the field of technology integration, the study *Apple Classrooms of Tomorrow (ACOT)* (Dwyer, Ringstaff, & Sandholtz, 1991) showed that there is a crucial relation between teachers' epistemological beliefs, pedagogical beliefs, and the technology use in the classroom. For grading, teachers' attitudes and perceptions on grading shape their own teaching practices and teaching philosophy (Bonner & Chen, 2009; Sun & Cheng, 2014). For PE teachers, evidence also indicates that teachers' attitudes toward grading influence the grading process and grading practices in PE (Duchane & French, 1998). For instance, PE teachers' "gut feelings" directly impact their grading processes (Svennberg, Meckbach, & Redelius, 2014).

Considering PE teachers' years of experience, it is evident that differences in grading practices arise across various stages of their careers. Generally speaking, pre-service teachers – who may be regarded as novice teachers – and in-service teachers – who may be regarded as expert teachers – differ in various aspects (Alkharusi, Kazem, & Al-Musawai, 2011). Hence, knowledge regarding teaching, learning, and the profession itself is much greater in experienced teachers compared to novice teachers (Schempp et al., 1998). For PE teachers, the same gap between novice and expert teachers can be noted (Behets, 2001; Hyndman, 2014; Schempp et al., 1998). For instance, professional vision in the sense of noticing meaningful classroom situations in PE differs according to experience level in PE teachers (Reuker, 2017). For grading, novice/pre-service teachers and expert/in-service teachers may have different views on handling grading according to differences in teaching experience, and theoretical and practical knowledge (Berliner, 2001; Grainger & Adie, 2014; Kuehl, Sofronas, & Lau, 2015). Overall, research comparing pre-service and in-service PE teachers is very limited, despite the importance of the topic and its implications for the profession.

Based on the fact that grading cannot be imagined to be removed from the (PE) teaching profession, it is quite surprising that a literature search revealed little research on the topic of grading in PE. Although there are practical guidelines and conceptual papers on assessment and grading (Lund & Kirk, 2010; Melograno, 2007; Rink, 2013), empirical findings are still limited (Ugras & Sahin, 2019). From the perspective of (PE) teacher

education, attitudes of (PE) teachers are very important to consider in terms of professional development and teaching competence. As research findings suggest, the gain of experienced in-service (PE) teachers in regard to teaching expertise compared to pre-service (PE) teachers may also be influenced by different attitudes of the respective group. The assumed difference in attitudes toward grading practices in PE between pre-service physical education teachers (PSPET) and in-service physical education teachers (ISPET) was the starting point of this study. Hence, the aim of this study is to compare the attitudes toward grading of PSPET and ISPET across various aspects, identifying both differences and similarities.

METHODS

Participants for this study were chosen by conducting a convenience sample of (German) PSPET (N = 132) and (German) ISPET (N = 134) from 21 schools in Germany. A questionnaire in German language was used that assessed attitudes on grading and personal data. To find a common set of teaching practices for grading in PE that fits knowledge and experience scopes of both PSPET and ISPET teachers, essential aspects of grading were extracted out of systematic research on (German) PE teachers' stress factors (König, 2004), and used for generating items for the questionnaire. Attitudes on grading items were 5-point Likert-scaled and ranged from 1 (strongly disagree) to 5 (strongly agree). The items were finalized and validated via group discussion with selected PSPET and ISPET (communicative and pragmatic validity).

Questionnaire data were transferred to a data sheet and analysed using the statistical software SPSS (Version 20). Procedures such as independent-samples t-test, (one-way and two-way) analysis of variance (ANOVA) and Tukey HSD post hoc test were performed to investigate differences of PSPET and ISPET data values.

RESULTS

An independent samples t-test was conducted to compare PSPET values of attitudes on grading and ISPET values on attitudes on grading.

There was a significant difference ($p < .001$) in the scores for PSPET ($M = 4.74$, $SD = 0.50$) and ISPET ($M = 4.93$, $SD = 0.26$) for AG1 ("When grading in PE, I always try to be fair."). There was a significant difference ($p < .001$) in the scores for PSPET ($M = 2.48$, $SD = 0.73$) and ISPET ($M = 2.04$, $SD = 0.88$) for AG2 ("I assess and grade student performance frequently, because students learn well under pressure."). There was a significant difference ($p < .001$) in the scores for PSPET ($M = 2.72$, $SD = 0.99$) and ISPET ($M = 1.97$, $SD = 1.03$) for AG4 ("Reviewing grades with students is pointless, because they tune out after receiving their grades."). There was a significant difference ($p < .001$) in the scores for PSPET ($M = 2.19$, $SD = 0.75$) and ISPET ($M = 3.09$, $SD = 1.05$) for AG7 ("I only give good grades, because poor grades in PE demotivate students.").

There was no statistically significant difference ($p > .05$) in the scores for PSPET and ISPET for AG3 ("Grading in PE puts pressure on the students and restricts their enjoyment of physical activity."), AG5 ("Grading in PE puts pressure on the students and restricts their enjoyment of physical activity."), and AG6 ("I always review grades with my students, because they thereby better understand and accept my decisions.").

For an overview of the t-test-results see Table 1.

Table 1 Attitudes on grading: PSPET vs. ISPET

	Attitude on grading	PSPET (N = 132) (Mean ± SD)	ISPET (N = 134) (Mean ± SD)	t-test
AG1	When grading in PE, I always try to be fair.	4.74 ± 0.50	4.93 ± 0.26	-3.718*
AG2	I assess and grade student performance frequently, because students learn well under pressure.	2.48 ± 0.73	2.04 ± 0.88	4.463*
AG3	Grading in PE puts pressure on the students and restricts their enjoyment of physical activity.	3.00 ± 0.84	3.06 ± 0.98	n.s.
AG4	Reviewing grades with students is pointless, because they tune out after receiving their grades.	2.72 ± 0.99	1.97 ± 1.03	6.071*
AG5	I don't grade students' performance outcome only, but also individual improvement.	4.23 ± 0.69	4.40 ± 0.90	n.s.
AG6	I always review grades with my students, because they thereby better understand and accept my decisions.	3.80 ± 0.73	3.70 ± 1.04	n.s.
AG7	I only give good grades, because poor grades in PE demotivate students.	2.19 ± 0.75	3.09 ± 1.05	-7.963*

Note. * – $p < .001$. n.s. – not significant. PSPET – pre-service physical education teachers. ISPET – in-service physical education teachers. Attitudes on grading range from 1 (strongly disagree) to 5 (strongly agree).

To identify whether there was a difference in PSPET and ISPET scores regarding experience level, an (one-way) ANOVA was conducted. In the PSPET group, study experience was coded "freshman", "advanced", and "post-internship". In the ISPET group, teaching experience was coded "beginner" (0-3 years), "advanced" (4-15 years), and "expert" (16+ years).

There was a significant effect of study experience in ISPET at the $p < .05$ level for the three different experience levels (freshman, advanced, post-internship) for AG4 ("Reviewing grades with students is pointless, because they tune out after receiving their grades."). Post hoc comparisons using Tukey's HSD test indicated that the mean score for beginner ISPET (M = 2.24, SD = 0.20) was significantly different ($p < .05$) than the mean score of advanced ISPET (M = 1.65, SD = 0.11). However, expert ISPET mean score (M = 2.13, SD = 0.15) did not differ significantly from beginner ISPET mean score and expert ISPET mean score.

An overview of the one-way ANOVA results is shown in Table 2.

Table 2 Attitudes on grading (ANOVA): PSPET (study experience) vs. ISPET (teaching experience)

	Attitude on grading	PSPET (study experience) (N = 132) (*F*)	ISPET (teaching experience) (N = 134) (*F*)
AG1	When grading in PE, I always try to be fair.	n.s.	n.s.
AG2	I assess and grade student performance frequently, because students learn well under pressure.	n.s.	n.s.
AG3	Grading in PE puts pressure on the students and restricts their enjoyment of physical activity.	n.s.	4.520*
AG4	Reviewing grades with students is pointless, because they tune out after receiving their grades.	n.s.	4.367*
AG5	I don't grade students' performance outcome only, but also individual improvement.	4.857*	n.s.
AG6	I always review grades with my students, because they thereby better understand and accept my decisions.	n.s.	n.s.
AG7	I only give good grades, because poor grades in PE demotivate students.	8.025**	n.s.

Note. * – $p \leq .05$. ** – $p \leq .001$. n.s. – not significant. PSPET – pre-service physical education teachers. ISPET – in-service physical education teachers. Study experience is coded "freshman", "advanced", "post-internship". Teaching experience is coded "beginner" (0-3 years), "advanced" (4-15 years), "expert" (16+ years).

If the result of the one-way ANOVA was significant, post hoc test comparisons were performed (Tukey's HSD test). There was a significant effect of study experience in PSPET at the $p < .05$ level for the three different experience levels (freshman, advanced, post-internship) for AG5 ("I don't grade students' performance outcome only, but also individual improvement."). Post hoc comparisons using Tukey's HSD test indicated that the mean score for freshmen PSPET (M = 3.91, SD = 0.22) was significantly different ($p < .05$) than the post-internship PSPET mean score (M = 4.39, SD = 0.80). However, the advanced PSPET mean score (M = 4.14, SD = 0.70) did not differ significantly from the freshmen PSPET mean score and post-internship PSPET mean score.

There was a significant effect of study experience in PSPET at the $p < .001$ level for the three different experience levels (freshman, advanced, post-internship) for AG7 ("I only give good grades, because poor grades in PE demotivate students."). Post hoc comparisons using Tukey's HSD test indicated that the mean score for freshmen PSPET (M = 2.73, SD = 0.14) was significantly different ($p < .05$) than the advanced PSPET mean score (M = 2.00, SD = 0.10) and the post-internship PSPET mean score (M = 2.13, SD = 0.10). However, the

advanced PSPET mean score did not differ significantly from the post-internship PSPET mean score.

There was a significant effect of study experience in ISPET at the $p < .05$ level for the three different experience levels (freshman, advanced, post-internship) for AG3 ("Grading in PE puts pressure on the students and restricts their enjoyment of physical activity."). Post hoc comparisons using Tukey's HSD test indicated that the mean score for beginner ISPET ($M = 2.76$, $SD = 0.14$) was significantly different ($p < .05$) than the mean score of expert ISPET ($M = 3.38$, $SD = 0.15$). However, the advanced ISPET mean score ($M = 2.96$, $SD = 0.13$) did not differ significantly from the beginner ISPET mean score and expert ISPET mean score.

Table 3 shows the results of the post hoc tests (Tukey's HSD).

Table 3 Attitudes on grading (Tukey's HSD post hoc test): PSPET (study experience) vs. ISPET (teaching experience)

	Attitude on grading	PSPET (study experience) (N = 132)	ISPET (teaching experience) (N = 134)
AG3	Grading in PE puts pressure on the students and restricts their enjoyment of physical activity.	n.s.	Beginner <> Expert
AG4	Reviewing grades with students is pointless, because they tune out after receiving their grades.	n.s.	Beginner <> Advanced
AG5	I don't grade students' performance outcome only, but also individual improvement.	Freshman <> Post-Internship	n.s.
AG7	I only give good grades, because poor grades in PE demotivate students.	Freshmen <> Advanced Freshman <> Post-Internship	n.s.

Note. n.s. – not significant.

DISCUSSION

To be fair, grading seems to be of higher value for ISPET compared to PSPET (AG1). ISPET may have a higher degree of awareness of the diverse structure of PE classes and their whole scope, may have experienced various altering effects of student performances and behaviour (Ni Chroinin & Cosgrave, 2013), and therefore try to take these external effects into consideration when grading. ISPET may also be more open to student views and demands, which feature fairness as an assessment criterion predominantly (Redelius & Hay, 2012, Solmon & Carter, 1995).

ISPET tend to agree to a higher degree on the notion that students learn well or better under pressure of grading settings (AG2). ISPET may have experienced the bad influence on students' performance and motivation (Krijgsman et al., 2011) first hand and more extensively than PSPET.

PSPET tend to judge students less attentive when reviewing their own grades compared to ISPET (AG4). Although there is limited to no data available on this specific situation in PE classes, research on students' perspectives on grading suggests that students may very well engage in reviewing their own grades. Experienced teachers may also drive the reviewing setting to a wider focus on teaching and learning methods, the teacher-student relationship, therefore positively influencing student motivation and student attitudes towards grading (Haerens et al., 2018; Leirhaug, 2015; Zhu, 2015)

Compared to PSPET, ISPET are more likely to give better grades in fear of demotivating students with poor ones (AG7). Interestingly, PE tends to achieve higher values in grades compared to other school subjects (Marmeleira et. al., 2020; Ugras & Sagin, 2019). However, there is evidence that grading demotivates students (Modell & Gerdin, 2022). Some PE teachers may also completely neglect the concept of grades in the school system and PE at all (Ugras & Sagrin, 2019), as some PE teachers were reported to not give any grade at all (James, Griffin, & Dodd, 2009; James, Griffin, & France, 2005).

Controlling for study experience in PSPET and teaching experience in ISPET, only two out of seven attitudes on grading in PSPET and two out of seven attitudes on grading in ISPET showed statistical significance.

Compared to PSPET post-internship, PSPET freshmen tend to focus more on student performance outcomes than individual improvement (AG5). Consistent with study progression, PSPET freshmen tend to agree more on giving good grades to not demotivate students compared to advanced PSPET and PSPET post-internship. The differences in regard to study experiences are consistent with PSPET literacy progression during their respective study program phases (Greve et al., 2021).

Overall, professional experience gained as an in-service teacher influences individual attitudes, either transforming or consolidating them (Berliner, 2001; Hoeksta et al., 2009). It stands to reason that this also accounts for study experience in PSPET, especially after gathering more field experience post-internship.

Since only four out of seven assessed attitudes toward grading showed statistically significant differences between PSPET and ISPET, it suggests that the differences between the two groups may not be as pronounced. This finding indicates a shared perspective on certain aspects of grading in PE, regardless of their respective career stages.

Despite the significant findings, this study has certain limitations that should be addressed, as several limitations restrict the overall scope and range of its results. First of all, the study was conducted using a convenience sample, which may reduce this study to a case study. Moreover, the findings may or may not reflect a particular study program or national (German) perspective. Attitude items were small in number to keep filling in the questionnaire short. Several aspects such as the effectiveness of diverse assessment methods have not been included in the current version of the questionnaire.

CONCLUSION

The main findings of this study reported a significant difference between some attitudes towards grading between PSPET and ISPET. There was a significant difference between some attitudes on grading in PSPET regarding study experience and also a significant difference between some attitudes on grading in ISPET regarding teaching experience. There was no gender effect.

Teacher educators should increase awareness of attitudes on grading in Physical Education Teacher Education (PETE) as well as PE pedagogy researchers should increase research activities to create more evidence in this field of study.

PETE programs may be in need to address grading more thoroughly. Teacher trainees could be used to raise awareness in internships and connect PSPET and ISPET. Furthermore, ISPET could be invited as guests to regular PETE classes to serve as discussion partners (Banville, 2006).

Professional Development courses for ISPET may also pick up grading attitudes and intertwine them with various assessment and grading methods (Leirhaug, & MacPhail, & Annerstedt, 2016). This could help developing a mindset of awareness in regard to grading students in ISPET (Jin et al., 2021).

As grading is a perceived problem by novice PE teachers (Saenz-Lopez, Almagro, & Ibanez, 2011), it is as well a challenging task for experienced expert teachers, as well as PETE students.

Further research may therefore focus on PE teacher training and professional development, exploring how to improve assessment and grading training in teacher preparation programs, the effectiveness of professional development on grading practices, and the difference in grading approaches between novice and experienced teachers.

Additional research could also concentrate on non-academic factors in grading in PE, which includes the prevalence and impact of including behavior, effort, and other non-achievement factors in grades, teachers' rationales for including these factors, and strategies for separating academic achievement from other factors in grading.

REFERENCES

Alkharusi, H., Kazem, A.M., & Al-Musawai, A. (2011). Knowledge, Skills, and Attitudes of Preservice and Inservice Teachers in Educational Measurement. *Asia-Pacific Journal of Teacher Education, 39*(2), 113-123. https://doi.org/10.1080/1359866X.2011.560649

Annerstedt, C., & Larsson S. (2010). 'I have my own picture of what the demands are…': Grading in Swedish PEH – Problems of validity, comparability and fairness. *European Physical Education Review, 16*(2). 97-115. https://doi.org/10.1177/1356336X103812

Banville, D. (2006). Analysis of Exchanges Between Novice and Cooperating Teachers During Internships Using the NCATE/NASPE Standards for Teacher Preparation in Physical Education as Guidelines. *Research Quarterly for Exercise and Sport, 77*(2), 208-221. https://doi.org/10.1080/02701367.2006.10599355

Behets, D. (2001). Value Orientations of Physical Education Preservice and Inservice Teachers. *Journal of Teaching in Physical Education, 20*(2), 144-154. https://doi.org/10.1123/jtpe.20.2.144

Berliner, D.C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research, 35*(3), 463-482. https://doi.org/10.1016/S0883-0355(02)00004-6

Bonner, S.M., & Chen, P.P. (2009). Teacher Candidates' Perceptions about Grading and Constructivist Teaching. *Educational Assessment, 14*(2), 57-77. https://doi.org/10.1080/10627190903039411

Duchane, K.A., & French, R. (1998). Attitudes and Grading Practices of Secondary Physical Educators in Regular Education Settings. *Adapted Physical Activity Quarterly, 15*(4), 370-380.

Dwyer, D., Ringstaff, C., & Sandholtz, J.H. (1991). Changes in teachers' beliefs and practices in technology-rich classrooms. *Educational Leadership, 48*(8), 45-52. https://doi.org/10.1123/apaq.15.4.370

Fang, Z. (1996). A Review of Research on Teacher Beliefs and Practices. *Educational Research, 38*(1), 47-65. https://psycnet.apa.org/doi/10.1080/0013188960380104

Grainger, P.R., & Adie, L. (2014). How Do Preservice Teacher Education Students Move from Novice to Expert Assessors? *Australian Journal of Teacher Education, 39*(7), Article 6. http://dx.doi.org/10.14221/ajte.2014v39n7.9

Greve, S., Weber, K.E., Brandes, B., & Maier, J. (2021). What Do They Reflect On?--A Mixed-Methods Analysis of Physical Education Preservice Teachers' Written Reflections after a Long-Term Internship. *Journal of Teaching in Physical Education, 41*(4), 590-600. https://doi.org/10.1123/jtpe.2021-0103

Haerens, L., Krijgsman, C., Mouratidis, A., Borghouts, L.B., Cardon, G., & Aelterman, N. (2018). How does knowledge about the criteria for an upcoming test relate to adolescents' situational motivation in physical education? A self-determination theory approach. *European Physical Education Review, 25*(4), 1001 - 983. https://doi.org/10.1177/1356336X18783983

Hoeksta, A., Brekelmans, M., Beijaard, D., & Korthagen, F. (2009). Experienced teachers' informal learning: learning activities and changes in behaviour and cognition. *Teaching and Teacher Education, 25*, 663-673. https://doi.org/10.1016/j.tate.2008.12.007

Hyndman, B. (2014). Exploring the differences in teaching perspectives between Australian pre-service and graduate physical education teachers. *Journal of Physical Education and Sport, 14*(4), 438-445. https://doi.org/10.7752/jpes.2014.04067

James, A.R., Griffin, L., & Dodds, P. (2009). Perceptions of middle school assessment: An ecological view. *Physical Education and Sport Pedagogy, 14*(3), 323-334. https://doi.org/10.1080/17408980802225792

James, A., Griffin, L.L., & France, T. (2005). Perceptions of assessment in elementary physical education: A case study. *The Physical Educator, 62*(2), 85-95.

Jin, X, Li, T., Meirink, J., van der Want, A., & Admiraal, W. (2017). Learning from novice-expert interaction in teachers' continuing professional development. *Professional Development in Education, 47*(4), 745-762. https://doi.org/10.1080/19415257.2019.1651752

Krijgsman, C., Vansteenkiste, M., van Tartwijk, J., Maes, J., Borghouts, L., Cardon, G., Mainhard, T., & Haerens, L. (2017). Performance grading and motivational functioning and fear in physical education: A self-determination theory perspective. *Learning and Individual Differences, 55*, 202–211. https://doi.org/10.1016/j.lindif.2017.03.017

König, S. (2004). Belastungen für Lehrkräfte im Sportunterricht. Ein Beitrag zur empirisch-analytischen Sportunterrichtsforschung. *Sportwissenschaft, 34*(2), 152-165.

Kuehl, G., Sofronas, K., & Lau, A. (2015). Pre-service and In-service Teachers' Rubric Assessments of Mathematical Problem Solving. *NERA Conference Proceedings 2014*, 1.

Leirhaug, P.E. (2015). Exploring the relationship between student grades and assessment for learning in Norwegian physical education. *European Physical Education Review, 22*(3), 298-314. https://doi.org/10.1177/1356336X15606473

Leirhaug, P.E., & MacPhail, A., & Annerstedt, C. (2016). 'The grade alone provides no learning': investigating assessment literacy among Norwegian physical education teachers. *Asia-Pacific Journal of Health, Sport and Physical Education, 7*(1), 21-36. https://doi.org/10.1080/18377122.2016.1145429

Lopez-Pator, V.M., Kirk, D., Lorente-Catalan, E., & MacPhail, A. (2013). Alternative assessment in physical education: A review of international literature. *Sport, Education and Society, 18*(1), 57-76. http://dx.doi.org/10.1080/13573322.2012.713860

Lund, J.L., & Kirk, M.F. (2010). *Performance-Based Assessment for Middle and High School Physical Education* (2nd ed.). Champaign, Il: Human Kinetics.

Marmeleira, J., Folgano, H., Martinez Guardado, I., & Batalha, N. (2020). Grading in Portuguese Secondary School Physical Education: Assessment Parameters, Gender Differences and Associations with Academic Achievement. *Physical Education and Sport Pedagogy, 25*(2), 119-136. https://doi.org/10.1080/17408989.2019.1692807

Melograno, V.J. (2007). Grading and Report Cards for Standards-Based Physical Education. *Journal of Physical Education, Recreation & Dance (JOPERD), 78*(6), 45-53.

Modell, N., & Gerdin, G. (2020). 'But in PEH it still feels extra unfair': students' experiences of equitable assessment and grading practices in physical education and health (PEH). *Sport, Education and Society, 27*(9), 1047-1060. https://doi.org/10.1080/13573322.2021.1965565

Ni Chroinin, D., & Cosgrave, C. (2013). Implementing formative assessment in primary physical education: teacher perspectives and experiences, *Physical Education and Sport Pedagogy, 18*(2), 219-233. https://doi.org/10.1080/17408989.2012.666787

Nordlöf, C., Höst, G.E., & Hallström, J. (2017). Swedish Technology Teachers' Attitudes to Their Subject and Its Teaching. *Research in Science & Technological Education, 35*(2), 195-214. https://doi.org/10.1080/02635143.2017.1295368

O'Connor, K. (2009). *How to Grade for Learning. K-12* (3rd ed.). Thousand Oaks, CA: Corwin.

Plake, B.S., & Impara, J.C. (1997). Teacher Assessment Literacy: What Do Teachers Know about Assessment? In G.D. Phye (Ed.), *Handbook of Classroom Assessment. Learning, Achievement, and Adjustment* (pp. 53-68). San Diego, CA: Academic Press.

Redelius, K., & Hay, P.J. (2012). Student views on criterion-referenced assessment and grading in Swedish physical education. *Physical Education & Sport Pedagogy, 17*(2), 211-225. https://doi.org/10.1080/17408989.2010.548064

Reuker, S. (2017). The noticing of physical education teachers: a comparison of groups with different expertise. *Physical Education and Sport Pedagogy, 22*(2), 150-170. https://doi.org/10.1080/17408989.2016.1157574

Rink, J.E. (2013). *Teaching Physical Education for Learning* (7th ed.). New York, NY: McGraw-Hill.
Saenz-Lopez, P., Almagro, B.J., & Ibanez, S.J. (2011). Describing Problems Experienced by Spanish Novice Physical Education Teachers. *The Open Sports Sciences journal, 4*, 1-9. http://dx.doi.org/10.2174/1875399X01104010001
Schempp, P., Tan, S., Manross, D., & Fincher, M. (1998). Differences in Novice and Competent Teachers' Knowledge. *Teachers and Teaching, 4*, 9-20. https://doi.org/10.1080/1354060980040102
Schempp, P.G., Manross, D., Tan, S.K.S., & Fincher, M.D. (1998). Subject Expertise and Teachers' Knowledge. *Journal of Teaching in Physical Education, 17*(3), 342-356. https://doi.org/10.1123/jtpe.17.3.342
Solmon, M.A., & Carter, J.A. (1995). Kindergarten and first-grade students' perceptions of physical education in one teacher's classes. *The Elementary School Journal, 95*(4), 355–365.
Sun, Y., & Cheng, L. (2014). Teachers' Grading Practices: Meaning and Values Assigned. *Assessment in Education: Principles, Policy & Practice, 21*(3), 326-343. https://doi.org/10.1080/0969594X.2013.768207
Svennberg, L., Meckbach, J., & Redelius, K. (2014). Exploring PE teachers' 'gut feelings'. *European Physical Education Review, 20*(2), 199-214. http://dx.doi.org/10.1177/1356336X13517437
Ugras, S., & Sagin, A.E. (2019). Why Do Physical Education Teachers Give High Grades? *Educational Policy Analysis and Strategic Research, 14*(4), 256-269. http://dx.doi.org/10.29329/epasr.2019.220.15
Zhu, X. (2015). Student perspectives of grading in physical education. *European Phsyical Education Review, 21*(4), 409-420. http://dx.doi.org/10.1177/1356336X15569628

STAVOVI O OCENJIVANJU KOD STUDENATA I AKTIVNIH NASTAVNIKA FIZIČKOG VASPITANJA

Procena i ocenjivanje uspeha učenika na času su ključni deo rada nastavnika. U poređenju sa drugim predmetima koji su vezani za učionicu, nastavnici fizičkog vaspitanja (FV) se obično bave praksama ocenjivanja u domenu motoričkog učenja i u sali za vežbanje (Rink, 2013). Budući nastavnici i aktivni nastavnici mogu imati različite stavove prema ocenjivanju u FV zbog razlika u nastavnom iskustvu, kao i teoretskom i praktičnom znanju (Alkharusi, Kazem, & Al-Musawai, 2011; Schempp et al., 1998). Ovaj rad ima za cilj da istraži perspektive aktivnih nastavnika fizičkog vaspitanja (ANFV) o praksama ocenjivanja i uporedi ih sa stavovima budućih nastavnika fizičkog vaspitanja (BNFV). Da bi se pronašao zajednički skup nastavnih praksi ocenjivanja u FV, koji odgovara obimu znanja i iskustva i budućih i aktivnih nastavnika fizičkog vaspitanja, ključni aspekti ocenjivanja izdvojeni su iz sistematskog istraživanja o faktorima stresa kod nastavnika FV (König, 2004). Komunikativna i pragmatička validnost odabranih stavki osigurana je grupnom diskusijom sa odabranim budućim i aktivnim nastavnicima FV. Anketirano je 132 budućih i 134 aktivnih nastavnika FV pomoću upitnika koji je sadržao stavke vezane za prikupljanje ličnih podataka i prethodno razvijene stavke o praksama ocenjivanja. Rezultati su pokazali statistički značajne razlike u nešto više od polovine stavova o praksama ocenjivanja (npr. „Često procenjujem i ocenjujem učenički učinak, jer učenici dobro uče pod pritiskom."). ANOVA je pokazala značajne razlike u vezi sa studijskim/nastavnim iskustvom u obe grupe u pogledu nekih stavova o ocenjivanju. Programi obrazovanja nastavnika FV i kontinuirani profesionalni razvoj nastavnika FV mogu obratiti više pažnje na promenu nastavnih praksi ocenjivanja kako bi se povećala svest o njima.

Ključne reči: *ocenjivanje, fizičko vaspitanje, obrazovanje nastavnika fizičkog vaspitanja, profesionalni razvoj, obrazovanje nastavnika.*