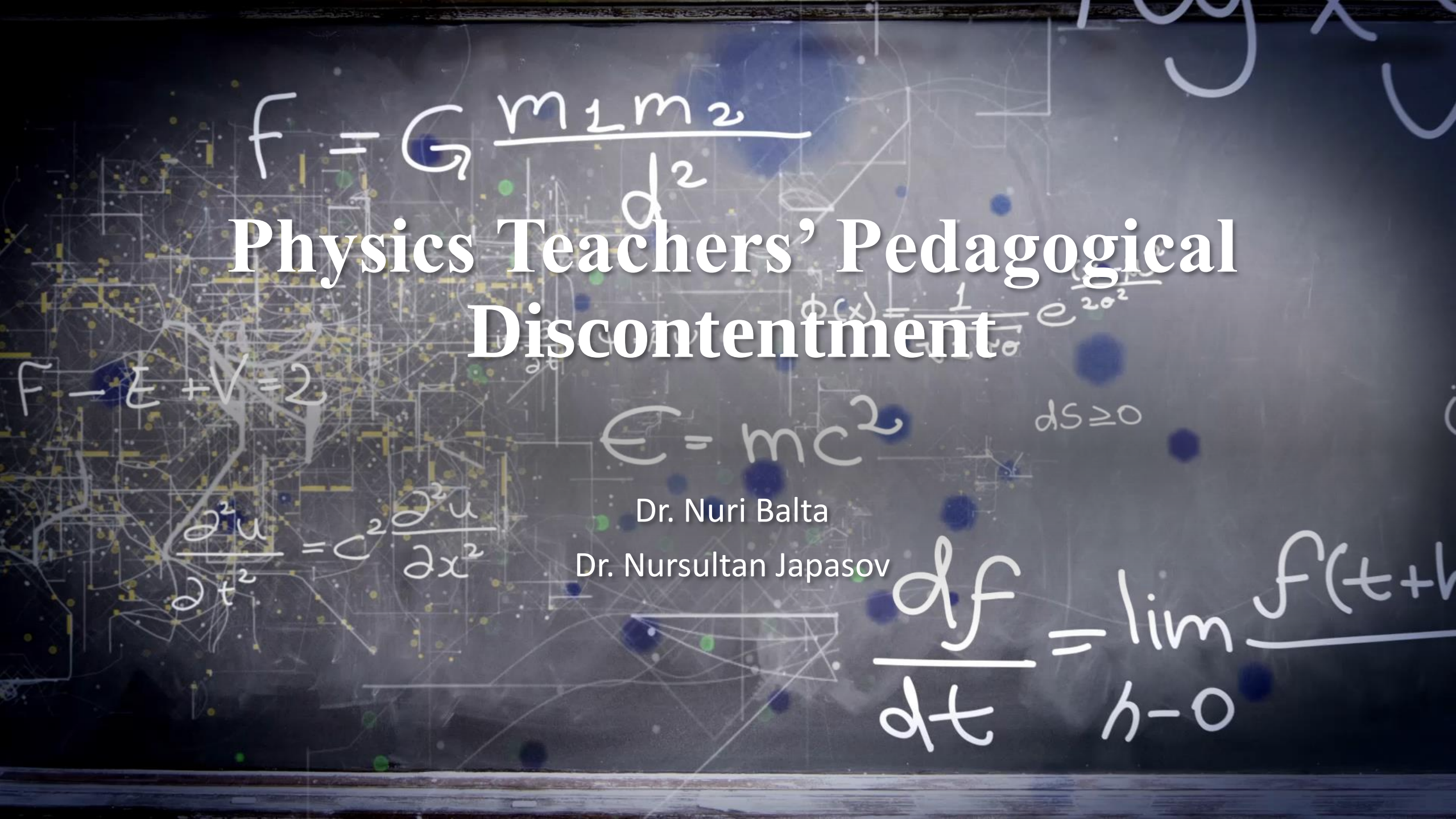


Physics Teachers' Pedagogical Discontentment

Dr. Nuri Balta

Dr. Nursultan Japasov

Aim

- The aim of this research is to describe physics teachers' pedagogical discontentment. Specifically, we measured the discontentment that arises in teachers as they recognize a mismatch between their own pedagogical beliefs and goals and their actual classroom practices. In other words, in this study physics teachers described their affective states as they enter professional development experiences.

Significance of the study

- Determining the level of pedagogical discontentment is necessary to improve the teaching of a particular subject through the correct professional development or reforms.

Methods

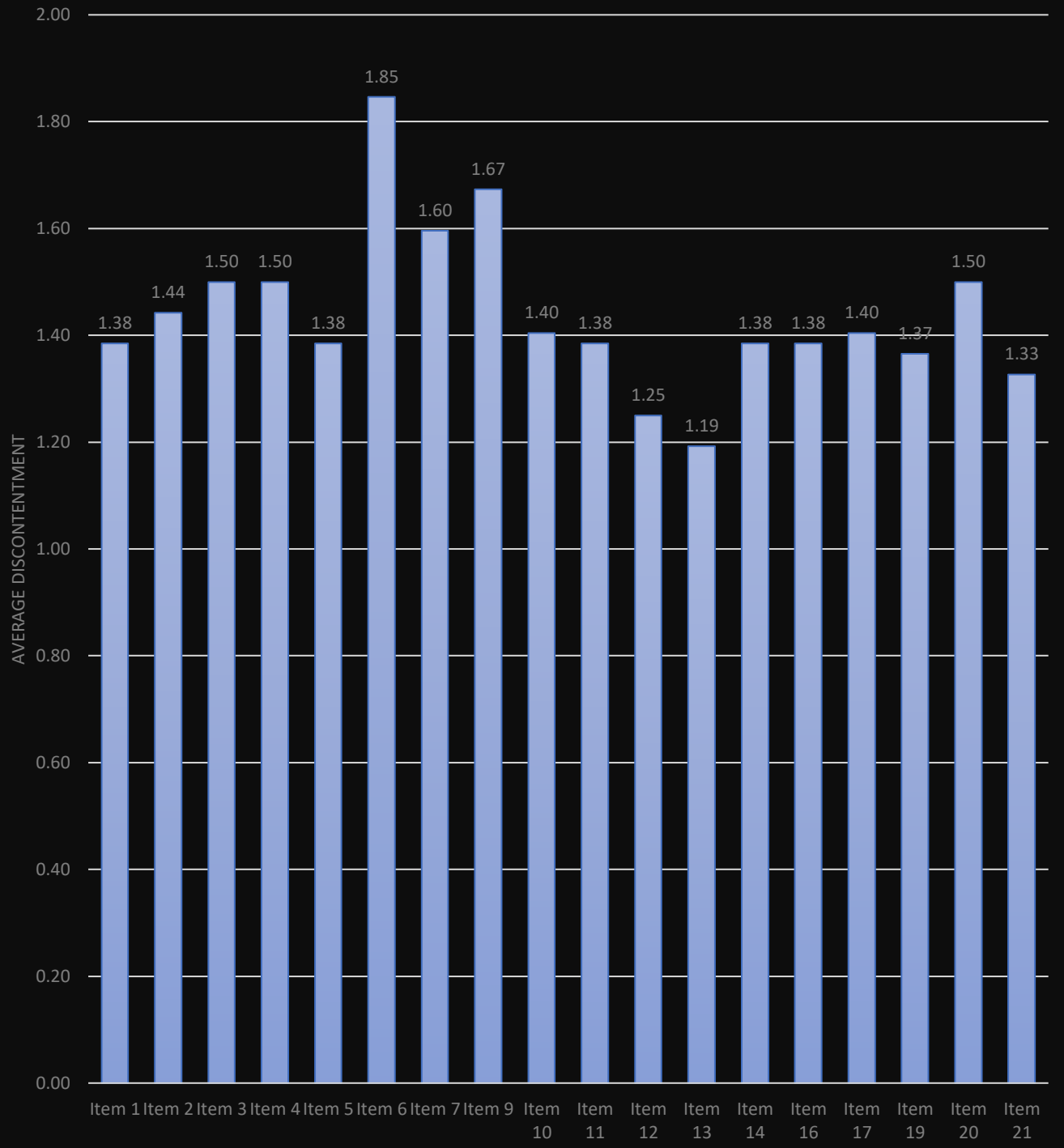
- This is a quantitative survey research. The 21-item instrument used in this study was adapted from Southerland et al, 2012.
- Teachers' level of discontentment was measured on a scale of 1-5 where 1 = no discontentment and 5 = very high discontentment.

Participants

- All items were translated to Kazakh, and the survey was administered online via Google Doc. The 52 teachers responded to survey had following demographics; 16 male and 37 females; teachers ages ranged between 24 and 58 with an average of 36 years; their work experience ranged from 0.6 up to 38 years with and average of 12 years; 21 teachers had master's degree and 31 had bachelor degree; they were teaching to seventh up to 12^{th} graders; 22 teachers were from village and 30 from city; and finally 10 were teaching at lyceum, 12 teaching at Gymnasium, and 30 from public school.

Findings

- Results indicated that teachers' level of discontentment is quite low. The average discontentment was measured to be 1.44 which corresponds to a level midway between no discontentment and slightly discontentment. On item bases the highest discontentment (1.85) was calculated for the 6th item (Using inquiry-based teaching within all content areas) while the lowest discontentment was calculated for 13th item (Teaching science to students of higher ability levels).



Findings

- We also searched for any correlation between discontentment and some other variables such as gender and teaching experience. We found no significant correlations. In other words, teachers' discontentment is not associated with age, work experience, teaching grades, gender, qualification, location, and type of school.

r	-0.08	-0.13	-0.13	-0.01	-0.002	0.24	-0.11
p	0.60	0.37	0.36	0.93	0.99	0.09	0.43

Findings

- We further run regression analysis to model teachers' pedagogical discontentment. To construct the model, we used discontentment score as the dependent variable and age, work experience, gender, qualification, and location of school as independent variables.
- The coefficients calculated from regression analysis yielded the following model for the teachers' discontentment.
- **Discontentment=11.74-0.53*Gender+3.56* Qualification+7.83* Location of school+0.42*Age-0.61* Work experience**

Predictor	Estimate	SE	t	p
Intercept [a]	11.74	11.82	0.99	0.33
Gender:				
Female – Male	-0.53	3.40	-0.16	0.88
Qualification:				
Bachelor – Masters	3.56	3.63	0.98	0.33
Location of school:				
City – Village	7.83	3.47	2.26	0.03
Age	0.42	0.48	0.88	0.38
Work experience (years)	-0.61	0.45	-1.35	0.18

Findings

- Also, for teachers' pedagogical discontentment we found no statistically significant differences for gender, qualification, and location of the school.

Conclusion

- This study implies that Kazakhstani physics teachers are confident in teaching and learning.