



**FOREIGN RESEARCH ADVISER REVIEW**  
on the Ph.D. Dissertation in Public Health  
(specialty code 6D110200 – Public Health) titled  
Utilization of Modified Checklist for Autism in Toddlers, Revised, with Follow-Up  
(M-CHAT-R/F) questionnaire as a screening tool  
for psychological and physical development of the pediatric population  
by Nukeshtayeva Karina Erlanovna

The study completed by Karina Nukeshtayeva is focused on the important public health issue, specifically, the early detection of autism and autism spectrum disorders (ASD) in toddlers. Since early ASD detection allows for timely start of supporting interventions and treatment, leading to higher changes of social adaptation of the affected individuals, the finding of the study may be associated with quality-of-life improvement for patients, as well as with potential reduction in governmental spending in the future.

The dissertation is presented in a traditional format with a well formulated justification of the topic, extensive literature review, detailed description of methodology, well presented statistical analysis and research findings. The research objectives of the study included a trend analysis of ASD prevalence and incidence in Kazakhstan, qualitative analysis of the lived experience of parents of ASD children, validity and reliability test of the M-CHAT-R/F tool adapted to Kazakh and Russian languages and test the usability of the tool in the screening process, leading to practical implications and recommendations for future use. The research objectives were met fully. The study employed several methodological approaches. A systematic literature review conducted was at the initial stage to identify current levels of knowledge and existing research outcomes. Qualitative study design was applied to identify main concerns, issues, and barriers in the diagnostic process for parents of ASD children, using individual interviews followed by a content analysis. Validity and reliability of the M-CHAT-R/F tool included dual translation process

for the original questionnaire, followed by reliability assessment as Cronbach's alpha for covariance and Cohen's Kappa measure of agreement between two dependent categorical samples. Finally, the validated tool was used during routine pediatric screenings, followed by detection of high-risk groups and subsequent referrals of those patients to specialists.

Throughout her dissertation work, Nukeshtayeva K.E. demonstrated a proactive and diligent approach to research. She exhibited the ability to independently address both scientific and practical challenges, showcasing her strong problem-solving skills and dedication.

High quality of the research is directly confirmed by the number of publications in peer-reviewed journals, as well as two patents. The level of research rigor, study significance, and practical implications of the findings in Ms. Nukeshtayeva's study displayed her dissertation as an independent, complete, original research required for earning the Ph.D. degree in Public Health.



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