

研究業績 英文表記

和文	
表題	幼稚園教諭らの仕事不継続意思診断モデル: 機械学習を用いた開発
著者名	松尾萌美 ¹⁾ 、松本幸太郎 ²⁾ 、東嶋美佐子 ¹⁾ 、調進 ³⁾ 、田中悟朗 ³⁾ 、吉田由利 ³⁾ 、東登志夫 ³⁾ 、宮原洋八 ¹⁾ 、小松洋平 ¹⁾ 、岩永竜一郎 ³⁾
所属	1)西九州大学 2)久留米大学 3)長崎大学
英文	
Title	Diagnostic model for preschool workers' unwillingness to continue working Developed using machine-learning techniques
Author	Moemi Matsuo ¹⁾ , Koutarou Matsumoto ²⁾ , Misako Higashijima ¹⁾ , Susumu Shirabe ³⁾ , Goro Tanaka ³⁾ , Yuri Yoshida ³⁾ , Toshio Higashi ³⁾ , Hiroya Miyabara ¹⁾ , Youhei Komatsu ¹⁾ , Ryoichiro Iwanaga ³⁾ .
Affiliation	1) Faculty of Rehabilitation Sciences, Nishi Kyushu University, 2) Biostatistics Center, Kurume University 3) Unit of Medical Science, Nagasaki University Graduate School of Biomedical Sciences,
Abstract	The turnover of kindergarten teachers has drastically increased in the past 10 years. Reducing the turnover rates among preschool workers has become an important issue worldwide. Parents have avoided enrolling children in preschools due to insufficient care, which affects their ability to work. Therefore, this study developed a diagnostic model to understand preschool workers' unwillingness to continue working. A total of 1002 full-time preschool workers were divided into 2 groups. Predictors were drawn from general questionnaires, including those for mental health. We compared 3 algorithms: the least absolute shrinkage and selection operator, eXtreme Gradient Boosting, and logistic regression. Additionally, the SHapley Additive exPlanation was used to visualize the relationship between years of work experience and intention to continue working. The logistic regression model was adopted as the diagnostic model, and the predictors were "not living with children," "human relation problems with boss," "high risk of mental distress," and "work experience." The developed risk score and the optimal cutoff value were 14 points. By using the diagnostic model to determine workers' unwillingness to continue working, supervisors can intervene with workers who are experiencing difficulties at work and can help resolve their problems.
keyword	diagnostic model, machine-learning (ML), mental health, turnover, work environment

※本データの英文表記は実際の論文上の表記とは異なります。