

DECLARATION

I, Raj Kumar Pal, do hereby declare that the work reported in this thesis entitled, “A Study on Teacher Engagement and Student Engagement in Relation to Academic Achievement of Secondary School Students of West Bengal” is entirely original and has been carried out by me, under the supervision of Prof. Nil Ratan Roy, Department of Education, Tezpur University.

No part of this thesis has been submitted anywhere else for any other degree.

The materials which are obtained from the various sources have been duly acknowledged at appropriate places of the thesis.

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CERTIFICATE OF THE SUPERVISOR

This is to certify that the thesis entitled "A Study on Teacher Engagement and Student Engagement in Relation to Academic Achievement of Secondary School Students of West Bengal" submitted to the Department of Education, School of Humanities and Social Sciences of Tezpur University in part fulfilment for the award of degree of Doctor of Philosophy for the research work carried out by Mr. Raj Kumar Pal under my supervision and guidance.

All the assistances received by him from various sources have been duly acknowledged.

No part of this thesis has been submitted elsewhere for the award of any other degree.

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LIST OF ABBREVIATIONS

ASV	Average Shared Variance
AVE	Average Variance Extracted
BE	Behavioral Engagement
CE	Cognitive Engagement
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Criterion Reliability
EE	Emotional Engagement
EFA	Exploratory Factor Analysis
GFI	Goodness of Fit Index
LLCI	Lower Level Confidence Interval
MGCFA	Multi Group Confirmatory Factor Analysis
MSV	Maximum Shared Variance
NFI	Normed Fit Index
OECD	Organization for Economic Cooperation and Development
PCFI	Parsimony Comapartive Fit Index
PCPE	Perceived Cognitive-Physical Engagement
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PNFI	Parsimony Normed Fit Index

PPE Perceived Pedagogical Engagement

PSEE Perceived Socio-Emotional Engagement

PTES Perceived Teacher Engagement Scale

RMSEA Root Mean Squared Error of Approximation

SELS Student Engagement in Learning Scale

SRMR Standardized Root Mean Squared Residuals

TIMSS Trends in International Mathematics and Science Study

TLI Tucker Lewis Index

ULCI Upper Level Confidence Interval

UN United Nations

UNESCO United Nations Educational, Scientific and Cultural Organization