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THE EFFECTS OF ATTITUDES TOWARDS STATISTICS, PERCEIVED ABILITY, LEARNING PRACTICES AND TEACHING PRACTICES ON STUDENTS' PERFORMANCE IN STATISTICS: A REVIEWBy: [Mahmu, Z](#) (Mahmu, Zamalia)^[1]; [Ismail, NZI](#) (Ismail, Nor Zatul-Iffa)^[2,3]; [Abu Kassim, NL](#) (Abu Kassim, Noor Lide)^[4]; [Zainol, MS](#) (Zainol, Mohammad Said)^[5,6]

AL-SHAJARA

Pages: 71-97 Special Issue: 1

Published: 2018

Document Type: Review

Abstract

This paper reviews the literature related to the teaching and learning of statistics and highlights the following variables affecting students' performance in statistics: students' attitudes towards statistics, students' perceived ability in statistics, instructors' teaching practices and students' learning practices. These variables have been chosen as these variables come from the self (student and teacher) where if self is well directed, teaching and learning becomes less complex and understanding will easily be established. Seeking knowledge has been greatly emphasized in Islam. The teaching and learning of statistics is becoming an increasingly important issue in statistical education. One pressing issue is how to continuously improve the teaching and learning of statistics at the tertiary level. Given its importance for the development of statistical literacy, statistical education researchers have attempted to investigate factors that relate to students' learning outcomes in statistics and these researches have shown that a number of factors are indeed associated with student performance in statistics. The Prophet Muhammad (S.A. W) said: "The seeking of knowledge is obligatory for every Muslim". (2) And the civilization of Muslims has been based on Islam's' emphasis on teaching and learning,

KeywordsKeyWords Plus: [SELF-EFFICACY](#); [ACHIEVEMENT](#); [BELIEFS](#); [MODEL](#)**Author Information**

Reprint Address: Mahmu, Z (reprint author)

Univ Teknol MARA Shah Alam, Fac Comp & Math Sci, Ctr Stat & Decis Sci Studies, Shah Alam, Malaysia.

Addresses:

[1] Univ Teknol MARA Shah Alam, Fac Comp & Math Sci, Ctr Stat & Decis Sci Studies, Shah Alam, Malaysia

[2] Univ Teknol MARA, Philosophy Informat Technol & Quantitat Sci, Shah Alam, Malaysia

[3] Int Islamic Univ Malaysia, Kulliyah Educ, Gombak, Selangor, Malaysia

[4] Int Islamic Univ Malaysia, Kulliyah Educ, Dept Language & Literacy, Gombak, Selangor, Malaysia

[5] Univ Teknol MARA, Ctr Studies Stat & Decis Sci, Shah Alam, Malaysia

[6] Univ Teknol MARA, Inst Res Management & Innovat, Shah Alam, Malaysia

Publisher

INT ISLAMIC UNIV MALAYSIA, NO 24 PERSIARAN DUTA, TAMAN DUTA, KUALA LUMPUR, 50480, MALAYSIA

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1. **Empirical Understanding of and Perceived Ability in Statistical Concepts: A Rasch Measurement Approach** Times Cited: **1**
 By: Abu Kassim, Noor Lide.
 INT C BEH COGN PSYCH Published: 2010
 presentation
2. **Guidelines for Assessment and Instruction in Statistics Education (GAISE)** Times Cited: **30**
 By: Aliaga, M.
 Project College Report Published: 2005
3. **Student Attitudes toward Statistics and Their Retention of Statistical Concepts** Times Cited: **2**
 By: Araki, L. T.; Shultz, K. S.
 ANN M W PSYCH ASS LO Published: 1995
 presentation
4. **Probability sampling and inferential statistics: An interactive exercise using M&M's** Times Cited: **12**
 By: Auster, CJ
 TEACHING SOCIOLOGY Volume: 28 Issue: 4 Pages: 379-385 Published: OCT 2000
5. **Relationship between the Learning Styles Preferences and Academic Achievement** Times Cited: **1**
 By: Awang, H.
 IOP C SERIES MAT SCI Published: 2017
 URL: <http://iopscience.iop.org.ezproxy.um.edu.my/article/10.1088/1757-899X/226/1/012193/pdf>
6. **Removing the Angst from Statistics** Times Cited: **1**
 By: Baharun, Norhayati; Porter, A.
 5 AS MATH C 2009 KUA Published: 2009
 presentation
7. **Reasoning about shape as a pattern in variability** Times Cited: **35**
 By: Bakker, A.
 Statistics Education Research Journal Volume: 3 Issue: 2 Pages: 64-83 Published: 2004
8. **Lessons from Inferentialism for Statistics Education** Times Cited: **47**
 By: Bakker, Arthur; Derry, Jan
 MATHEMATICAL THINKING AND LEARNING Volume: 13 Issue: 1-2 Special Issue: SI Pages: 5-26 Published: 2011
9. **Learning to Reason about Distribution** Times Cited: **46**
 By: Bakker, K.; Gravemeijer, A.
 The Challenge of Developing Statistical Literacy, Reasoning, and Thinking Pages: 147-68 Published: 2004
 Publisher: Kluwer, Dordrecht, The Netherlands
10. **Self-efficacy** Times Cited: **1,396**
 By: Bandura, A.
 Encyclopedia of human behavior Volume: 4 Pages: 71-81 Published: 1994
 Publisher: Academic Press, New York
11. **Controversies around the role of statistical tests in experimental research** Times Cited: **24**
 By: Batanero, C.
 Mathematical Thinking and Learning Volume: 2 Issue: 1-2 Pages: 75-98 Published: 2000
12. **Toward understanding the role of technological tools in statistical learning** Times Cited: **41**
 By: Ben-Zvi, D.
 Mathematical Thinking and Learning Volume: 2 Issue: 1-2 Pages: 127-155 Published: 2000