

# Effect of FEEDBACK ON HEXACO & LEARNING STYLES on ACADEMIC BEHAVIORS

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## ABSTRACT

Personality and learning-style tests have been known to predict academic success. However, self-awareness (metacognition) of these results could predict achievement still further. The HEXACO personality test measures different trait spectrums, which can give recommendations for various professions, while a learning styles assessment analyzes how a person learns in the most efficient manner. If students receive feedback concerning their results, will they have more applicable study skills, declared major and career choice, and higher attendance than those who do not receive feedback? To calculate this, a binary logistic regression was used to predict differences between students who exhibit certain academic behaviors and choices. Participants were recruited through the UTSA subject pool (SONA) and were given online versions of HEXACO test, a learning styles explanation, and a brief demographic questionnaire; subsequently a self-report to measure a person's class attendance, study skills, academic confidence, declared major, and career choice was administered. In addition to the feedback variable being used, gender, SAT/ACT scores, college classification, and age were also measured as covariates in the regression equation. The results determined, if administering and providing feedback concerning the HEXACO and the learning styles explanation improved study skills and attendance, increased confidence, and led to solidified choices of both major and career.

## INTRODUCTION

- ❖ HEXACO has high criterion validity and highly validated psychometric measurements.
- ❖ Learning styles application have increased efficiency in learning and assisting students in all levels of education.
- ❖ No current data exists on metacognitive properties of HEXACO & learning styles.

## PURPOSE

One major purpose of this study is to determine if knowledge of one's personality and learning styles improves the chances of college students deciding their major and career choices faster, therefore, having to spend less money on both the students and university's accounts. The second purpose is to determine if knowledge of one's personality and learning style improves measures of academic motivation and confidence.

## METHODOLOGY

- ❖ 141 UTSA students recruited through SONA under approved IRB protocol.
- ❖ HEXACO-PI-R test & learning styles assessment (based on VARK).
- ❖ Online survey using Qualtrics research data collection software.
- ❖ Two IV's: Feedback or No Feedback groups.
- ❖ 6 DV's: Study skills, attendance, confirmed career, confirmed major, confidence regarding career, and confidence regarding major..
- ❖ Logical Regression for categorical dependent variables in SPSS.

## HYPOTHESES

H<sub>1</sub>: A higher percentage in definite career choice is expected in the post-test from group who sees their results of the HEXACO and learning styles pre-test surveys.

H<sub>2</sub>: The group who sees their results of the pre-test are expected to more likely than not have a definitive major on the post-test compared to those who did not see the results of the HEXACO and learning styles assessments.

H<sub>3</sub>: The group that sees the results of the HEXACO and the learning styles explanation in the pre-test are expected to have superior study skills in the post-test compared to those who did not receive results from the pre-test.

H<sub>4</sub>: The group that receives the HEXACO results and the learning style explanation in the pre-test would attend a higher percentage of classes when measured at the post-test compared to the group that did not see their results.

H<sub>5</sub>: The group that receives the results from HEXACO and the learning styles description in the pre-tests would have higher confidence in their career choice in the post-test compared to those who did not see the results in the pre-test.

H<sub>6</sub>: The group that receives the results from HEXACO and the learning styles explanation in the pre-tests would have higher confidence in their declared major in the post-test compared to those who did not see the results in the pre-test.

## RESULTS

- ❖ N=141 pre-test, N=34 for post-test
- ❖ Attendance: Logistic regression model correctly predicted 67.6%. Hosmer & Lemeshow Test Chi-square of 1.897 (p=.929). Nagelkerke R Square was .276.
- ❖ Study Skills: Logistic regression model correctly predicted 61.8%. Hosmer & Lemeshow Test Chi-square of 4.448 (p=.727). Nagelkerke R Square was .171.
- ❖ No significant results due to insufficient participants for the post-test.

## DISCUSSION

- ❖ The study was not able to start in a timely manner due to a late response from the IRB.
- ❖ VARK was originally going to be used for the learning styles IV. However, permission was denied due to refusal for licensing to student researchers.
- ❖ Due to the low number of subjects and uneven group sizes, four out of the six dependent variables were unable to be analyzed with a binary logistic regression.
- ❖ For future research, this study should be repeated since results were not able to be collected due to the 75%+ attrition rate of participants.

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