

# Impact of Personal Values on Learning Approaches and Academic Achievements in UK higher education

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## **ABSTRACT**

In the post-Covid era of higher education, blended teaching has become the standard method of instruction. This approach incorporates various modes of delivery, and it is important for students to engage in the diverse form of learning. Considering students' preferences for learning approaches, especially independent learning, is crucial in the development of blended teaching methods. One of the key factors affecting students' preferences is personal values, which can influence student's adoption of learning approaches. This, in turn, affects their engagement in the learning community and their academic performance (Gamage, Dehideniya and Ekanayake, 2021). Personal values vary culturally, and this is particularly relevant when developing blended teaching strategies for cohorts of mixed nationalities. This issue is especially pronounced in the departments and schools across the UK universities, which often have a diverse student body with mixed cultural backgrounds. Our research aims to examine the role of personal values (specifically self-direction values and conformity values) in students' adoption of independent learning and the impact of these values on their academic achievement in blended teaching context.

Our research was conducted in 2022 through an internship scheme sponsored by WMG. We conducted a Qualtrics survey with the convenient sample of 162 among which 146 from China (including Hong Kong S.A.R.). The results indicated that self-direction values were closely correlated with both independent learning and academic achievement while no significant correlation was found between conformity values and independent learning or between conformity values and academic performance were found. The research results

hold considerable importance for educators in design self-directed study for students from varied cultural backgrounds in higher education settings.

## **INTRODUCTION**

In the post-Covid era, the blended teaching has become the standard way of teaching and learning in UK higher education. This approach involves various modes of delivery, shifting some of the responsibility for learning process from teachers to students (Meyer, Haywood, Sachdev and Faraday, 2008). The effectiveness of blended learning and its impacts on academic performance can be significantly affected by students' preferences for or adoption of independent learning approaches. This is particularly relent in the departments and schools across the UK universities, which often have a diverse student cohort with varying cultural backgrounds. Our research aims to examine the role of personal values, specifically self-direction values and conformity values in students' adoption of independent learning, the mediating role of independent learning in the relationship between personal values and academic achievements, and the direct impact of personal values on student's academic performance in a blended learning context.

## **LITERATURE REVIEW/RATIONALE**

### **Independent Learning**

Independent learning is defined as "learning in which the direction, control and regulation of the learning process is solely guided and managed by the learner" (Balapumi and Aitken, 2012, p.2). A key ingredient in independent learning is the shift of responsibility for the learning process from the teacher to the student (Meyer, Haywood, Sachdev and Faraday 2008). The research has shown that independent learning entails various stages such as independent learner, interested learner; involved learner and independent, self-directed learner (Grow, 1991). The role of teacher should be adjusted to match these stages (Grow, 1991) to assist student in becoming independent learners by ensuring their active involvement in learning (Meyer et al, 2008).

Many investigations regarding student perspectives of independent learning have been conducted in recent years, particularly focusing on blended teaching, largely as a consequence of COVID-19. For example, a study showed that in a flipped classroom setting, where independent learning was required, students appreciated the flexibility of

learning at their own time and space, and found that in-class support motivated them to study independently (Fox and Docherty, 2019). Similarly, in a study comparing online and traditional face-to-face microbiology laboratory sessions, a preference emerged among students for a combination of both. They appreciated the opportunity of being able to work flexibly and at their own pace online and considered that some information was better accessed and visualised online rather than in face-to-face laboratory sessions (Salter and Gardner, 2016).

## **Academic Performance**

Considerable research has been undertaken to explore the factors that affect students' academic performance. For example, Estrada, Monferrer, Rodríguez and Moliner (2021) discovered that emotional intelligence is positively related to compassion and higher levels of commitment, which lead to better academic performance. The well-known ability-based model of emotional intelligence by Mayer, Caruso and Salovey (1997) defines it as the skill for processing emotional content information. Bankole Adeyemi (2019) found a significant influence of the peer group on academic performance. There is clearly evidence that personal values can predict and affect academic performance (Gamage et al, 2021; Parks and Guay, 2012; Grande and Simons, 1967). It has been shown that achievement values and academic performance are related (Parks and Guay, 2011); Self-direction-thought and Conformity-rules correlated with higher grades; Self-direction thought promoted grades through autonomous forms of academic motivation; Conformity-rules through better teachers' evaluations of students' classroom behaviour. Meanwhile, Self-direction-action and conformity-interpersonal were unrelated to grades. Hedonism and Stimulation were related negatively to grades (Vecchione and Schwartz, 2021).

## **Personal Values and Academic Performance**

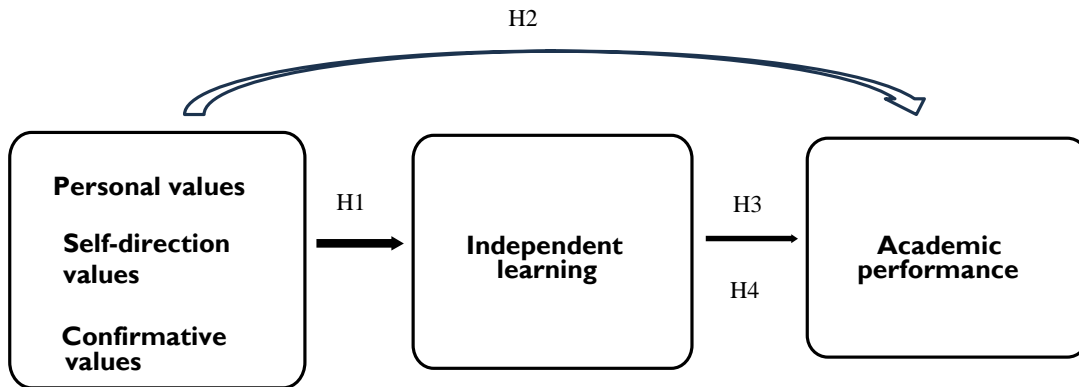
Indeed, the impact of personal values on students' academic achievements has been consistently identified in research across different contexts and environments. For example, research on academic achievements of engineering students in relation to their personal values dated back to Grande and Simon (1967). Vecchione and Schwartz (2022) examined the role of basic values, such as self-direction values and conformity value, in predicting students' academic achievement in an Italy school. For students in the Italian secondary school, self-direction values had more significant effects on their academic performance. A quantitative study conducted in a Turkish school showed that most students exhibited a collaborative learning style. Moreover, it was found that students with a participant learning style had significantly higher academic performance than students with other learning styles

(GRSLSS: Avoidant, Collaborative, Competitive, Dependent, Independent and Participant) (İlçin, Tomruk, Yeşilyaprak, Karadibak, and Savcı, 2018).

## Personal Values, Learning Approaches and Academic Performance

Research has also revealed that personal values can affect students' adoption of learning approaches and further their academic performance (Gamage et al, 2021). However, the research has been conducted in individualistic culture. There has been little research on independent learning and academic performance of students in collectivistic countries. Among the studies focusing on collectivistic culture, the role that personal values play was not emphasized. Most research has focused on only on collectivistic countries or only individualistic countries, rather than comparing the two. There has been little research on the impacts of personal values on learning approaches and the mediating relationship between personal values, learning approaches, and academic performance for students from collectivistic cultures in higher education.

Figure 1. Conceptual Framework (Note: Created by authors)



## METHODOLOGICAL APPROACH

We conducted the research last summer through an internship scheme sponsored by WMG. The ethical approval was granted, and the research was conducted with adherence to the guidelines of University of Warwick. We used a convenience sampling method for our Qualtrics survey. The questionnaires were mostly distributed via students' chat groups and social media, with some collected through the researcher's personal contact. Our sample (n=152) consisted of 136 participants from China (including Hong Kong S.A.R.) and

16 from other countries: United Kingdom, Sri Lanka, Malaysia, France, Costa Rica, Belize, Bangladesh, Austria, Antigua and Barbuda, Andorra, Algeria, and Afghanistan. Among the 136 Chinese participants, 80 were postgraduates in the UK with an undergraduate degree from Chinese universities; 27 had completed both their postgraduate and undergraduate degrees in the UK; 11 were current undergraduates in the UK (or had obtained an undergraduate degree from UK universities); and the remaining 18 had various education backgrounds, including those completed both *postgraduate and undergraduate degrees in China, as well as undergraduates in Canada and in China.*

*In terms of measurements, the **Autonomous Learning Scale (ALS)**, consisting of 12 items developed by Macaskill and Taylor (2010), was used to examine the level of independent learning and learning approaches of participants. ALS (Macaskill and Taylor, 2010) was developed in the context of higher education. Therefore, we selected it as the measure of independent learning for our research. Responses were recorded on a 5-point Likert scale ranging from 1 (very unlike me) to 5 (very like me). The higher the score, the higher the indicated level of autonomy.*

The **Portrait Values Questionnaire (PVQ)** was used as a measure of personal values. Schwartz's work on personal values was the most highly cited papers and the PVQ was applied in many studies to measure personal values. Developed by Schwartz et al. (2001), the PVQ consists of 40 measurements aimed at examining Schwartz's 10 basic human values, with items 1, 11, 22, 34 measuring Self-direction, and items 7, 16, 28, 36 measuring Conformity. Since gender was not a focal point of our study, we combined the male and female versions of PVQ into a single version by adding the feminine pronouns in brackets next to the masculine ones. For example, item 1 ('Thinking up new ideas and being creative is important to him. He likes to do things in his own original way'). becomes 'Thinking up new ideas and being creative is important to him (her), He (She) likes to do things in his (her) own original way.'. A 6-point Likert scale, ranging from 1 (Not like me at all) to 6 (Very much like me) was used to indicate the extent to which of the person described in the term resembled the participant.

*Table 1. Number of Participants by Countries/Regions*

<b>Country/Region</b>	<b>Number of participants</b>
China (including Hong Kong S.A.R.)	136
United Kingdom	1
Sri Lanka	1
Malaysia	1
France	1
Costa Rica	1
Brazil	1
Bangladesh	1
Antigua and Barbuda	1
Andorra	1
Algeria	1
Afghanistan	1

*Table 2. Breakdown of Chinese students by education background*

<b>Education background</b>	<b>Number of participants</b>
Postgraduates in the UK with undergraduate degree from China	80
Both postgraduate and undergraduate degrees in the UK	27
Current undergraduates in the UK (or undergraduate degree)	11
Various (including postgraduate and undergraduate degree in China, undergraduate degree in Canada)	18

## **KEY FINDINGS**

We conducted the preliminary analysis. For the independent learning construct, we employed the Exploratory factor analysis (principal components analysis) with varimax rotation using the IBM SPSS Statistics software. Notably, the Kaiser-Meyer-Olkin value and Bartlett's test of

sphericity for our data (0.824,  $p < 0.001$ ) suggested that our investigation, based on the responses we collected, was scientifically valid. For the analysis of PVQ data, we also used SPSS software. The internal reliabilities in terms of Cronbach's Alpha ( $\alpha$ ) were 0.67 for Self-direction, 0.55 for Conformity, 0.56 for Benevolence, 0.72 for Achievement, 0.34 for Power, 0.63 for Tradition, 0.42 for Stimulation, 0.71 for Hedonism, 0.72 for Security and 0.73 for Universalism. Except for Stimulation, which was significantly lower than expected, the other values were in line with those found by other researchers.

Table 3. Results of Exploratory Factor Analysis

Test	Results
Kaiser-Meyer-Olkin (KMO) value	0.824
Bartlet's test sphericity	$p < 0.001$

Table 4. Cronbach's Alpha Reliability for PVQ values

Value type	Cronbach's $\alpha$
Self-direction	0.67
Conformity	0.56
Benevolence	0.56
Achievement	0.72
Power	0.34
Tradition	0.63
Stimulation	0.42
Hedonism	0.71
Security	0.72
Universalism	0.73

We analyzed the relationship between Self-direction and students' grade using Pearson's correlation coefficients. Self-direction was positively correlated with students' grades ( $r = 0.18$ ,  $p < 0.05$ ). Particularly, the item "He (She) thinks it's important to be interested in things. He (She) likes to be curious and to try to understand all sorts of things" was significantly correlated with grades ( $r = 0.22$ ,  $p < 0.01$ ). However, while Conformity was expected to be positively

correlated with grades, the data did not suggest a strong relationship between them. We compared the effects of Self-direction with those of Conformity on independent learning and grades (here the value of item ‘Autonomous Learning’ was the sum of the 12 items in ALS). The analysis revealed that Self-direction was closely correlated with both independent learning and grades, while no significant correlation was found between Conformity and independent learning and either independent learning and grades.

*Table 5. Relationship between Self-Direction, Conformity and Students’ Grades*

Variables	Correlation with Grades (r)	p-value	Notes
Self-direction	0.18	p<0.05	Positive correlation
Self-direction (Item 22)	0.22	P<0.01	Significantly correlated
Conformity	Not significant	Not significant	No strong relationship found

## **DISCUSSION**

We conducted a preliminary analysis of the data, and thus, the findings were not conclusive. The analysis showed that self-direction values were significantly associated with independent learning, while no strong relationship was found between conformity values and independent learning. These results support our hypotheses, suggesting that there are no differences for students from different cultural background. In both collectivistic and individualistic countries/cultures, self-direction values can influence students’ adoption independent learning approach (Gamage et al, 2021; Parks and Guay, 2012; Grande and Simons, 1967).

However, the results revealed some disparities between the hypotheses based on theories and the empirical data. For instance, the analysis showed that for Chinese students, self-direction values were significantly associated with academic performance. Conversely, the data did not indicate a strong relationship between conformity values and academic performance. Traditionally, it is assumed that for students from collectivistic countries, their cultural values such as conservatism, would affect their personal values including conformity values. Therefore, it is often believed that conformity values are more dominant than self-



direction values and that they would significantly impact academic performance either negatively or positively.

## **CONCLUSIONS & RECOMMENDATIONS**

Some interesting findings emerged from the preliminary analysis. It is recommended that future studies should aim to collect data from a larger sample size. The current sample consisted of students who have already adjusted to independent learning, and to some extent, the individualistic values. Therefore, the results might not be applicable to students who are new to the UK. Conducting a longitudinal study and collecting data at different phases of their study in the UK could provide valuable insights.

Owing to the limitation inherent in the convenience sampling method, the sample encompassed students from diverse courses and subjects. Consequently, the relevance of the research findings to engineering students requires further investigation.

Moreover, it is recommended that a cross-cultural project be undertaken to understand the significance of personal values on independent learning and academic performance across different cultures, gender, and disciplines.

In terms of practice, it is important to raise awareness about the significance of students' self-direction values in relation to their independent learning. The key issue is to enhance students' self-direction values, which are crucial for them to adopt independent learning approaches and improve their academic performance.

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