

The Antecedents and Outcomes of Higher Education Student Ethics

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Scholars believe that students “cheating” behaviour at school has a significant effect on their unethical behaviour at work. Scholars argue that many ethical studies have different foci such as behavioural rather than attitudinal approaches, rigid rather than dynamic perspectives, different moral frameworks, and wider use of exchange theory. Accordingly, this study investigates the further robust model of students' ethical behaviour. This study collected 588 respondents from Indonesian and Malaysian students of various faculties who completed the survey. The ethical behaviour of the student is believed to have internal and external antecedents and outcomes. A better level of ethics is expected to increase their outcomes. It is also indicated that ethical behaviour mediates its antecedents to the outcomes. It shows that the effect of students' learning motivation and resilience on the team may change if the student has better ethical behaviour. Hence the proper ethical development programs for the student may achieve better results.

Key words: *Ethics model, antecedent, outcomes.*

Introduction

Scholars believe that students “cheating” behaviour at school has a significant effect on their unethical behaviour at work (Ballantine, Guo, & Larres, 2016; Christensen, Cote, Jane, & Latham, 2016; Lawson, 2004; Massey, 2017). The ill services in the business world are reflected by dishonest students graduating and entering the workplace with a set of dubious ethical values. Those with poor behaviour at school promote equal behaviour at work. The students' idealism and political ideology such as being conservative or liberal have a significant effect on their ethical decision. The students at state and liberal arts universities are estimated to differ from those at certain categories of religious universities. Religiosity is believed to play a significant role in unethical behaviour (Y. J. Chen & Tang, 2013).

However, some students may have high moral reasoning ability, and if they are unable to recognise the event as one with a moral choice, they may not behave ethically and vice versa.

Theoretically, students with an ethical decision-making framework able to improve their ethical judgment and integrate their previous ethical education to increase their ethical sensitivity (Mladenovic, Martinov-Bennie, & Bell, 2017). Hence, ethics education is able to increase the students' ethical perceptiveness, reflective, and decision-making skills (Avci, 2017). A cognitive ethical concept is usually utilized to analyse the investigation of the students' ethical behaviour (Arfaoui, Damak-Ayadi, Ghram, & Bouchekoua, 2016; Barnhardt & Ginns, 2017; Massey, 2017; Serodio, Kopelman, & Bataglia, 2016). Hence ethical sensitivity, ethical judgment, ethical intention, and ethical action/behaviour seem interrelated. However, theory of planned behaviour (TPB), social cognitive theory (SCT), social learning and identity theories, the social norms theory, the theory of moral sentiments, and moral foundation theory is believed to answer and examine the intentions of students' ethics differently (Andersen, Zuber, & Hill, 2015; Birtch & Chiang, 2014; Blay, Gooden, Mellon, & Stevens, 2016; Cheng & Chu, 2014; Christensen et al., 2016; Sorensen, Miller, & Cabe, 2017).

Empirically, students' ethics is related to different antecedents and various outcomes. The professional experience, choice of major, political ideology, gender, GPA, education level, ethical climate of school, corporate social responsibility, sustainability in management education, integrated ethics programs, religiosity, civic engagement, teleological moral philosophy, and utilitarian motives give various effects to ethical behaviour of students (Birtch & Chiang, 2014; Y. J. Chen & Tang, 2013; Dzurinin, Shortridge, & Smith, 2013; Murphy, MacDonald, Antoine, & Smolarski, 2016; Price & van der Walt, 2013; Setó-Pamies & Papaoikonomou, 2016; Walker, Dyck, Zhang, & Starke, 2017; Windels & Christiaens, 2007), whereas the outcome of students' ethics is believed to have different forms between within school and society (Floyd, Xu, Atkins, & Caldwell, 2013). The ten outcomes of ethical behaviour are included providing information about theories and concepts of ethical decision making, clarifying rules for publishing academic articles, motivating others to understand their own value systems, examining the pressures of the current business environment that influence ethical decisions, explaining the consequences of unethical behaviour, establishing a culture that reinforces personal integrity and honesty, creating better systems that monitor conduct and the consequences of dishonesty, identifying the benefits of virtuous business conduct in creating wealth, fostering dialogue about ethics and values and their importance, and increasing communication between the academic and business communities about ethics issues. Whereas others believe that students' ethics affect pragmatic and realistic behaviour, ethical sensitivity, ethical judgment, design thinking, and social cohesion (Enderle, 2016; Hamington, 2017; Jonson, McGuire, & O'Neill, 2015; Martinov-Bennie & Mladenovic, 2015). However, scholars argue that many ethical studies have different foci such as behavioural rather than attitudinal approaches, rigid rather than dynamic perspectives,

difference of moral frameworks, and wider use of exchange theory (C.-H.V. Chen & Indartono, 2011; Christensen et al., 2016; McClaren, 2015). Furthermore, recent debates of moral development theory - which are found to be the best for understanding ethical decision making, facilitating ethical behaviour - are still going on (Ellertson, Ingerson, & Williams, 2016). Accordingly, further studies are needed, and it is plausible to investigate the further robust model of students' ethical behaviour.

Hypotheses Developments

The study of the ethical behaviour of students is likely to be important. Scholars have conducted various researches to investigate the contribution of the ethical behaviour of students. Hence the students' ethical behaviour is found to affect their commitment and academic integrity, collective self-confidence, effective ethics-related teaching, moral identity, supportive community, ethics artefacts and structure, sense of preparedness, and ethical behaviour of other students (Curtis & Williams, 2014; Hanson & Moore, 2014; Lewis, 2014; McCabe, Butterfield, & Treviño, 2006; Ogbari, Oke, Ibukunoluwa, Ajagbe, & Ologbo, 2016; Saiz-alvarez, 2017; Shafaei, Nejati, Quazi, & von der Heide, 2016). The students' ethical orientation makes them able to resolve questions of moral behaviour and issues of values that define the concepts of good and evil, right and wrong, virtue and vice, and justice and crime in student behaviours (Churchill, 1999; Kidder, 2005; Ptaschunder, 2017; Stajanov, 2017). However, the ethical intention at school is found to be varying. The difference of theoretical groundwork such as the theory of planned behaviour, the dual-process theory, the social learning theory, the decision affect theory, and the prospect theory contributes to the prediction of ethical intentions differently (Hsiao, 2015). Based on the theory of planned behaviour, the students who act ethically generate better academic performance, supportive community and ethical behaviour of others. Whereas based on the dual-process theory, the ethical behaviour of students produces collective self-confidence and a sense of preparedness. Accordingly, different points of view deliver the effect of student ethical behaviour on many outcomes.

Based on the Theory of Planned Behaviour, students act ethically if they learn academic behaviour and its consequences, and learn the difficulties posed by unethical behaviour (Meng, Othman, D'Silva, & Omar, 2014). However, recent studies integrating the theory of planned behaviour, person orientation, and spheres of control, found that students' ability to exercise ethical judgment does not mean that they are likely to behave in an ethical manner. This is because ethical awareness has not been demonstrated to translate into ethical behaviour. Thus, student motivation is believed to be a central tenet at school. Mann argues that "Students who are intrinsically motivated will choose to engage in an activity because they find it inherently interesting and seek to participate due to gaining enjoyment from the activity. On the other hand, extrinsic motivation is considered external to the individual. That

is, the individual will participate because they feel obliged or required to do so” (Mann, 2017). Thus, motivation is likely to be an effective way to encourage the student to act ethically and able to influence the individual, group, and institutional outcomes such as other students' motivation (Huda, Jasmi, Mustari, Basiron, & Sabani, 2017; Kovinthan & McPherson, 2017), seek and reach institutional effectiveness (Fried & Chapman, 2012; Hoyt & Feb, 2001; Linnenbrink, 2005) such as engaged in the classroom than others, and accounted for a significant amount of the variance in all the school outcomes (Wolters, 2004). Within the dynamics of learning, it is believed that the sustainable level of motivation and high moral purposes is closely monitored to gain better educational climates. Students' self-motivation and willingness to be responsible for their own decisions encourages them to increase their thought, feeling, and willingness to aim for perfect personality (Chun-Hsi Vivian Chen & Indartono, 2011; Huda et al., 2017).

Scholars believe that the effort to increase student ethical behaviour is in line with the development of its antecedents. The academic behaviour learning process, the deeper awareness of the consequences of unethical behaviour, and learning motivation promote the student to act ethically. Thus, to maximize the level of motivation is important to have a multiple and indirect effect on increasing ethical behaviour. Empirically, the better learning motivation has significantly come up from classroom goal condition, personal goal orientations, teacher leadership, students' self-efficacy, quality instruction, classroom management, and mastery-oriented practices, and that in turn increase ethically sensitive behaviour (Kunter, Baumert, & Köller, 2007; Linnenbrink, 2005; Öqvist & Malmström, 2017; Schiefele, 2017; Sogunro, 2017).

Theoretically, based on the robust concept, the social cognitive perspective assumes that perception of one's environment, personal characteristics and its behaviours interact in complex and influential ways on motivation (Bandura, 2004; Garn, Xiang, & Sun, 2017). This theory specifies a core set of determinants, the mechanism through which they work, and the optimal ways of translating this knowledge into effective behaviours. Whereas the achievement goal theory proposes that students' motivation is considered from the reasons or purposes they adopt while engaged in academic work. It encourages students' learning strategies such as choice of activities, their effort within those activities, and their persistence at those activities (Wolters, 2004). However, implicit theories of ability are believed to explain that the attributes and behaviours are malleable, controllable qualities that can be developed; attributes and behaviours are fixed, and quantities are stable (Howell, 2017; Warburton & Spray, 2017). Whereas the self-determination theory counts that motivation comprises of innate psychological nutrients that are essential for ongoing psychological growth, integrity, and well-being, and thus endorse the one needed for competence, autonomy, and relatedness (Keshtidar & Behzadnia, 2017; Sun, Li, & Shen, 2017). Accordingly, student motivation is concluded to consist of a set of psychological contracts to

reach various achievements at school. Pleasure-oriented theory of motivation is also found to have a stronger association with students' achievement rather than a productivity-oriented one. Pleasure-oriented motivation is like enjoyment-based intrinsic motivation (Lindenberg, 2001; Zhu & Leung, 2011). It plays a role in intrinsic motivation behaviour with the behaviour itself and no apparent reward. The behaviourist theory points out that the situation of tangible rewards tends to decrease rather than increase the frequency of the behaviour. That various perspectives are likely related to the different concept of students' ethics.

The mechanism of motivation-ethics relationships is described in the inter-correlation of both indicators. Based on the cognitive evaluation theory, scholars argue that students' motivation indicators are included; free choice, enjoyment, feeling of obligation, and sustainability (Lindenberg, 2001). However, others believe that motivation is based on self-determination theory. Different types of motivation are arranged on a continuum based on the degree of self-determination such as intrinsic motivation, integrated regulation, identified regulation, interjected regulation, external regulation, and motivation. Hence, the indicators are included (include?) autonomy, competence, and relatedness (Sebire et al. 2013). Yet, students displaying a high level of competence or avoiding a display of incompetence, which, according to the implicit theories, show indicators of their motivation (De Castella & Byrne, 2015). Whereas based on the personal investment theory, students' motivation is shown by a sense of self, facilitating conditions, and achievement goals (Bernardo, Ganotice, & King, 2015). Accordingly, the result of motivation effect on ethics is shown in several forms of ethical behaviour (Horváthová, Černek, & Kashi, 2014; Kuye, Uche, & Akaighe, 2015; Leonard, Cronan, & Kreie, 2004; Lin, 2007; Pratt & James, 1993). They argue that unethical behaviour is shown in byte actions of corruption, economic crime, and other social and socio-pathological phenomena (Horváthová et al. 2014). Whereas in technological education, the expression of creativities and ideas, solving problems, designing, illustrating, and executing products are the ethical concern of education processes (Lin, 2007). Accordingly, the offering of free choice, enjoyment, feeling of obligation and sustainability on displaying a high level of competence, autonomy, and relatedness or avoiding a display of incompetence, autonomy, competence, and relatedness in learning processes, may keep the byte actions of corruption, economic crime, and other social and socio-pathological phenomena down. Hence, the rationale of students' motivation and ethical relationships are indicated for several reasons. A motivated student is encouraged with underlying ethical considerations. Thus, based on the theory of planning behaviour, a student who is oriented to overall success will behave ethically. His/her motivation to study bands his un-ethical behaviour such as academic dishonesty (Thomas, 2017). His learning strategy is intended for the ethical pose to strengthen his final achievement. In accordance with the self-determination theory, humans have three main psychological needs, which are competence, and autonomy. (have only named two of the three psychological needs mentioned) Hence students need to build a

supporting study environment that promotes their learning strategies to reach their final achievements.

The research of students' ethics indicated that scholars found different forms of outcomes (Evuarherhe, Gattrell, White, Winchester, & Barn, 2018; Frauenberger, Antle, Landoni, Read, & Fails, 2018). They argued that the different situations of learning environment promotes a different effect of outcomes (Vandemeulebroucke, Dierckx de Casterlé, & Gastmans, 2018). Students' orientations on their learning process and future work are believed to create various forms of behaviour that are affected by their ethical concern. Thus, the hypothesizes proposed are:

Hypothesis 1: That students act ethically is motivated by various form of antecedents

Hypothesis 2: The ethical behaviour of students promotes the various form of outcomes.

Method

The empirical test of the ethical behaviour model of higher education is developed to investigate the critiques of the recent ethical behaviour theories and their empirical findings. Hypothesis constructs such as learning motivation, self-efficacy, resilience, team strain, and a cooperative classroom environment were explored for this study.

The 14 items of learning motivation such as “In general, I believe I can do any assignment well” are developed from Mistler-Jackson & Butler Songer (Mistler-Jackson & Butler Songer, 2000). The 6 items of self-efficacy and 6 items of resilience are developed from Luthans & Youssef (Luthans & Youssef, 2004). The sample items of self-efficacy are “I felt confidently analysing the long-term problem of finding a solution in my study” whereas the item sample of resilience is “In achieving my learning goals, I encountered many failures”. The 14 items of the ethical behaviour instruments were adopted from Rodzalan and Saat (2016). The sample of the questionnaires is “The faculty (i.e. lecturers, administrator) will reward me when I do something ethical”. The 20 items of Cooperative Classroom Environment such as “I got better grades when I was studying with other friends” are developed from Premo, Cavagnetto, & Lamb (Premo, Cavagnetto, & Lamb, 2017). The 17 Team strain items adopted from Schein such as “My study group feels that if there is a problem with employment, then the industrial practice task can help solve the problem” are adopted (Schein, 1993)

Data are collected from a higher education institution in Indonesia and Malaysia. Random convenience sampling is used to gather the data. This study collected 588 respondents from Indonesian and Malaysian from various faculties who completed the survey. They came from different faculties such as the economic faculty, engineering, mathematics, natural science,

social science, sport science, art and education science.

Table 1: Loading factor of construct

	Self-Efficacy	Coop-Class	Team	Resilience	Motivation	Ethics	Optimism
E8						.514	
E12						.513	
E13						.548	
Mot5					.614		
Mot8					.588		
Mot11					.645		
Mot15					.564		
Eff1	.603						
Eff2	.601						
Eff3	.628						
Eff4	.547						
Eff5	.562						
Eff6	.616						
Res1				.520			
Res5				.564			
Res6				.504			
Opt5							.591
Opt6							.606
TS4			.546				
TS5			.735				
TS6			.711				
TS7			.741				
TS8			.709				
TS9			.718				
TS10			.746				
TS11			.580				
TS12			.593				
CCE1		.657					
CCE3		.541					
CCE4		.560					
CCE5		.632					
CCE7		.524					
CCE8		.546					
CCE9		.613					

	Self-Efficacy	Coop-Class	Team	Resilience	Motivation	Ethics	Optimism
CCE10		.668					
CCE11		.657					
CCE13		.536					
CCE14		.542					
CCE16		.595					
CCE17		.566					
CCE18		.563					
CCE19		.561					

The confirmatory factor analysis (CFA) is adopted to test the quality and adequacy of the item's measurement. In accordance with the two-step procedure suggested by Anderson and Gerbing (1988), the CFA is performed to examine the validity of the multi-item construct measures (table 1), construct validity and reliability of construct (Table 2). The initial specification search led to the deletion of some of the items on the constructed scale to provide an acceptable fit. Cronbach's value of construct (Cronbach, 1991) in table 2 shows greater than 0.7. Thus, the internal consistency found on the construct measured has been achieved. Convergent validity is determined by the value of correlation among each construct. Fornell and Larcker suggest that correlations value among constructs less than .85 is good (Fornell & Larcker, 2012). Therefore, the constructs of this study show good convergent validity.

Table 2: Correlation and Cronbach α

		Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1	Gender	1.26	.439	-										
2	income	1.36	.603	.153**	-									
3	GPA	3.53	.558	-.203**	-.185**	-								
4	Semester	1.39				-.059								
5	Ethics	3.51				-.030	.06							
6	Motive	2.63				-.20	-.08	.07*						
			.723	.183**	.064	0	0	7*	.723					

						3*	1								
						*	5								
7	Efficacy	3.66					-	.2	-						
			.510	.086*	.014	.01	.04	.06*	.00	.83					
						0	6	*	6	0					
8	Resilience	3.75					-	.2	.1	.3					
			.609	.073	.038	.01	.00	.08*	.02	.03	.69				
						9	2	*	*	*	1				
9	Optimism	3.83						.2		.2					
			.636	-.079	.009	.00	.00	.06*	.04	.01*	.66				
						0	1	*	6	*	7				
10	Team Stream	3.78					-								
			.505	-.094*	-.046	.00	.01	.02	.03	.05	.88				
						6	*	5*	3	4*	*				.91
						2	*	*	4	*	*				3
11	Coop Class	3.91					-	.2	-	.3					
			.436	-.003	-.051	.00	.00	.02	.00	.06	.69				
						6	5	0*	5	4*	*				.41
						6	7	*	9	*	*				6**
															.89
															6

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Results and Discussion

An empirical model testing is found by using the effect of self-efficacy, learning motivation and resilience on Students Ethics to promote team strain and cooperative classroom environment. The result of SEM analysis by using AMOS found the final model of the ethical behaviour of higher education students. The result of statistical analysis for the model shows the model is approved within an acceptable fit. This study using an AMOS 22.0 version to

conduct a confirmatory factor analysis of the measurement model. The chi-squared ($df = 512$) $\chi^2 = 1324,882$ is significant ($p < 0.01$) (Bollen, 1989). The ratio of chi-square to the degree of freedom (df) is 2,588 (Marsh & Hocevar, 1985). The value of CFI = .920, IFI = 0.921, TLI = .902, NFI = .878 and RMSEA = .052. Thus, based on the fitting standard of Marcoulides and Schumacker's, the result of CFA indicate a satisfactory fit for the measurement model (Marcoulides & Schumacker, 1996).

The standardized regression weights on the default model in table 3 show the significant findings of learning motivation and learning resilience as the antecedents of student's ethics indicate that ethical behaviour is dependent on the student level of their internal behaviours. The quality of student's learning motivation and their resilience in their study is believed to strengthen their effort to behave ethically. Thus, they likely should prepare their level of student's learning motivation and their resilience to deal with the consequence of their ethical behaviour at school. The different learning motivations and their resilience influence the student on their ethical behaviour. Accordingly, the student may decide to act ethically when he/she has better learning motivation and resilience. The students' learning motivation boosted by the various teaching methods brought about certain student ethical changes that in turn resulted in positive feedback and higher involvement (Horng, Hsu, & Tsai, 2019). Thus, the teacher has an important role to encourage the student to act ethically. Those with intrinsic learning motivations promote personal ethical responsibility to manifest their self-esteem and identity and perceived work ethic (Tran & Vu, 2017). When students' are interested in a certain course, they want to be missed at a class as their ethical requirement in class engagements. However, the negative direct effect of learning motivation on cooperative classrooms may have different views. Students seem to ask for a cooperative environment to motivate their study (Huang, Shen, & Huang, 2018). Hence, the influence of individual students on the group is found to vary. Learning motivation, self-efficacy, and resilience of students all have a significant effect on the cooperative classroom environment. Students with better self-efficacy and resilience at study promote cooperation in class. Their self-efficacy and resilience stimulate an optimism that makes a class more dynamic with more collaboration and cooperation in learning process.

Table 3: Regression Weight of the Model

			Estimate	S.E.	C.R.	P
Ethics	<---	Motivation	0,257	0,071	3,628	***

Ethics	<---	Self-efficacy	0,148	0,090	1,652	0,098
Ethics	<---	Resilience	0,170	0,070	2,435	*
Coop Class Environment	<---	Ethics	0,053	0,026	1,992	*
Team Strain	<---	Ethics	0,075	0,025	2,963	**
Team Strain	<---	Motivation	-0,014	0,035	-0,406	0,685
Coop Class Environment	<---	Motivation	-0,112	0,038	-2,959	**
Team Strain	<---	Self-efficacy	0,412	0,056	7,293	***
Coop Class Environment	<---	Self-efficacy	0,351	0,058	6,035	***
Team Strain	<---	Resilience	0,027	0,036	0,743	0,457
Coop Class Environment	<---	Resilience	0,088	0,038	2,292	*

The result of this study is that the cooperative class environment and team strain are the significant outcomes of student's ethics. The students with better perceived citizenship in the class tend to build the class environment to be more cooperative (Ahmad, Said, & Jusoh, 2015). They feel responsible in creating the learning process to be more valuable in delivering knowledge and practice through better communication, sharing, and cooperation among class members. Hence the power of ethics promotes a significant level of cooperation in the class environment. Interestingly, it is found that student ethic has a positive effect on team strain. This study found a significant effect of student ethics on team strain. It indicates that ethical behaviour inflicts a feeling of crisis and anxiety in class members collectively. Students who try to behave ethically in adherence to regulation and code of ethics outlined by the university promote anxiety in their team in dealing with problems at school. The higher standard of ethics often brings up the feeling of stress and anxiety among team members leading to them wanting to escape from crisis and conflict.

The indirect effect of learning motivation, self-efficacy, and resilience of study on cooperative classroom and team strain are shown to be positive and significant. It indicates that the ethical behaviour of students plays a significant role in those models. It mediates the effect of learning motivation ($\beta = -.014$, $\beta' = .019^{***}$) and resilience ($\beta = .027$, $\beta' = .013^{***}$) on team strain, and mediates partially the effect of self-efficacy ($\beta = .412^{***}$, $\beta' = .011^{***}$) on team strain, self-efficacy ($\beta = .351^{***}$, $\beta' = .008^{***}$), learning motivation ($\beta = .112^{***}$, $\beta' = .014^{***}$), and resilience ($\beta = .088^{***}$, $\beta' = .009^{***}$) on cooperative classroom environment. This study indicates that a better level of ethical behaviour may increase the effect of learning motivation and resilience on team strain. With ethics, the learning motivation and resilience influence team strain significantly.

The Implication of the Ethical Modeling



Compared to previous studies, out of the validation process of the measurement model (Anderson & Gerbing, 1988) which included item validity and construct reliability and validity, this behavioural model contributes to measuring the internal and external factors which relate to the ethical behaviour of higher education students. The ethical behaviour of the student is believed to be promoted by their internal support and promotes external outcomes. Hence HE students behave ethically when they have a better level of learning Motivation, Self-Efficacy and Resilience in dealing with various tasks at school. Accordingly, internal motivations play a significant effect to promote students' ethics. Whereas the ethical behaviour of students brings about various external conditions significantly. It promotes cooperative relationships in class. The finding of the positive effect of student ethics on strain in the team needs to be clarified. It may also happen in the competitive environment among students.

Limitations and Future Research

According to the model of fit results from this study, an advanced study must investigate the possibilities of the model of ethical behaviour in a different context such as the level of team diversity, student gender, private and public school, and so on. Longitudinal studies on the change of context and inclusion of intervention for a student may have a different effect on the ethical model of students. Hence the proper ethical development programs for a student may achieve better results.

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