

# Correlation between Knowledge, Experience and Common Sense, with Critical Thinking Capability of Medical Faculty's Students at Indonesia Christian University

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## Abstract

This research discusses correlation between knowledge, experience and common sense with critical thinking of Medical Faculty's Student. As to the objective of this research is to find the correlation between knowledge, experience and common sense with critical thinking of Medical Faculty's Students at Christian University of Indonesia. It is conducted in Christian University of Indonesia at Medical Faculty precisely, which of 72 students had been elected as research from total population of 250 students who actively attend Medical Educational Program of 2011/2012. Random sampling technique is the the applied one, it is *questionnaire* comprising 34 questions. The Data analyzed by Skewness and Kurtosis test. Research finding had obtained that knowledge, experience and common sense has positive correlation with critical thinking of students. As to correlational coefficient between variable X1, X2 and X3 to Y is 0.234. Hence, it may be concluded that to increase critical thinking capability of students then, knowledge, experience and common sense should be increased as well.

**Keywords:** Knowledge, experience and common sense, critical thinking capability, correlation.

## 1. Introduction

Of course, capability of critical thinking is highly required for some profession in our life, by critical thinking capability owned by individual; he/she may make the correct/right decision. Yet, advantage and explicit teaching of critical thinking is still not popular as well. Indeed, if we observe our current world progress development, we had undergone acceleration at some issues increasingly, trend to more complex interdependence. In this case, critical thinking capability is highly required. If not, then, we will be crushed by epoch progress. Regarding the definition of critical thinking is capability to collect and evaluate facts and information using obvious reasoning method to make the correct/right decision. By conduct such critical thinking capability continuously, then, automatically, our thought will be evaluated and become improvement of thinking process vehicle finally.

By current information and technology era, critical thinking is wished become any skill which should be owned by individuals at all knowledge disciplines, profession or even any different domain. Additionally, such information technology may assist individuals in order to increase his/her critical thinking capability, because unlimited/no border information access had been available, so that, more easily to apply critical thinking process for achieving the best solution in making decision. It may occur as result of such information technology resource had provided all information we need. But, in line with so many information resources are available at such information technology positively or negatively, then, there is data or information *overflow*, hence, such information election become as evaluation and training to increase our thinking capability based on credibility and relevance.

From some descriptions above it may be concluded that learning for critical thinking each time in our life is any necessity if we want both to make decision and direct change which will shape our future. So, we should rise up and realize to make it popular and receive it as core social value.

But factually, we had found the different in site, individual dislike studying for increasing their critical thinking capability. To do anything they trend to seek out more practice and faster ways. It is proven by minor observation conducted by researcher to some students, such observation finding revealed that 80% of them used resources provided in internet to respond the duty assigned by lecture, of 15% by slightly revising from they obtain and its residue 5% just use it as reference solely. Other than such facts, there are some other facts such as juvenile delinquency, it may occur because their critical thinking capability is low.

Critical thinking may be applied in learning situation either in school or at work place or otherwise in any business decision. As well as in context of democracy community, we may choose both political options and right political candidates in order to support the elected option. Contribution of critical thinking may be implemented at some domains: education, job opportunity/work plan which will give any illustration such as how to manage study achievement to be better one, as well as how to make rational decision at work place to contribute maximal result.

Of course, individual who has good critical thinking capability should be supported by some factors such as knowledge, experience, common sense and some other supporting factors.

Depart from description above it makes the researcher is highly stimulated to conduct any research while finding out the correlation between knowledge, experience and common sense with critical thinking.

Hence, the title of this research concepts is as follows: “**Correlation between Knowledge, Experience and Common Sense with Critical thinking capability at Medical Faculty’s Students in the Christian University of Indonesia.**” Wishfully, there is positive correlation between those researched variables.

## 2. Review Theory

In this section will be described literature review which has direct relation with this research variable; from critical thinking, Knowledge, Experience, and common sense as follows:

Critical thinking is daily general term, it means the reasonable and reflective thinking focused on the best trustable and applicable decision making. Additionally, of course, in making decision critical thinking is highly required to analyze what topic or other issues to be decided. Also it will not be released from What, When, Where, How and Why such topic should be discussed. Similarly, Ennis (1996) said that *critical thinking is reasonable, reflective thinking focused on deciding what to believe or do*. Whereas, Paul (1992) said that *critical thinking is thinking about your thinking, while you are thinking, in order to make your thinking better* and Mustaji (2012) said that critical thinking is reasonable and reflective thinking with stressing to decision making on what decision to be trusted and done. From those three definitions above then, it may be drawn conclusion that critical thinking is process to bring about better thinking result in order to achieve better, trustable and applicable target or decision.

Of course, in process of critical thinking it will require both intellectual capability and comprehension. When it is conducted each day and continuously, then, such critical thinking will be any habit as special skill to be owned by his/her.

Critical thinking covers capability both to respond materials and distinguish between facts and opinions or self feeling, evaluation and conclusion, as well as inductive, deductive, objective and subjective arguments. Also it includes capability to bring about questions, to develop and recognize and support arguments sufficiently, to define, analyze, to arrange solution for problems and issues, to sort, regulate, classify, connect materials and data, integrate information and observe correlation, evaluate information, materials and data while drawing conclusion and arrive at normal conclusion and information, apply comprehension and Knowledge for new and different problem, develop rational and reasonable interpretation, to firm belief and stay opened to new information, method, work system, value and beliefs and by assimilating information (McPeck, 1981). More and Parker & Moore (2011) also agree with this case while saying critical thinking is circumspection in determining what to be conducted intentionally, may we receive, refuse or cancel claims, and our belief to receive or refuse it.

Similarly, also it had been revealed by Alvino (1990) that critical thinking is high thinking skill and capability rate. It occurs because such critical thinking covers analysis process, synthesis process and evaluation process. Some issues to be observed for critical thinking; evaluation resulting interpretation, analysis, evaluation and conclusion as well as clarification from substation, concepts, methodology; and contextual consideration for what evaluation to be based on. Hence, such individual with critical thinking should conduct as follows: high curiosity, transparent and flexible thinking, fair evaluation, to encounter personal bias honestly, to evaluate wisely, ready to reconsideration, clear in issues, to look for relevant information diligently, to focused criteria properly, focused on investigation, and to find out result as precise subject persistently, and adhere to investigation norms/ethics.

Slightly, it is not different to what had been said by (Nickerson, 1987) that there are some following critical thinking characteristics: a) to use substation adeptly and equally, b) to distinguish between logic and valid conclusion with invalid one, c) to give argument for any decision, d) to understand between reasoning and rationale) to anticipate possible consequences from other alternative actions f) to understand ideas for high confidence degree, g) to observe similarity and analogies h) to learn independently and have interest to do, i) to apply problem solving techniques and j) sensitivity against difference between truth of any belief and intensity for what will be done.

There are some issues which may distinguish between individual who has critical thinking and not; good critical thinking should have cognitive skills those are: for individual who has critical thinking he/she has good interpretation, analysis and evaluation whereas, individual who has not critical thinking he/she has cognitive weakness, those are: he/she lack of cognitive skill to identify and secure required elements for drawing reasonable conclusion, to shape assumption and hypothesis, to consider relevant information, and to stimulate data flowing consequences, statements, principles, substation, beliefs, opinions, concepts, description, questions or representative modes. Other than lack of capability to interpretate, analyze, evaluate and conclude, good critical thinker may conduct two other issues. They no longer may clarify what they think and how to arrive at such conclusion.

Hence, from those all descriptions it may be concluded that critical thinking is capability to respond materials while distinguishing between facts and opinions or self feeling, evaluation and conclusion as well as inductive, deductive, objective and subjective arguments. It also to bring about questions, to develop and recognize and support arguments sufficiently, to define, analyze, to arrange solution for problems and issues, to

sort, regulate, classify, connect materials and data, integrate information and observe correlation, evaluate information, materials and data while drawing conclusion and arrive at normal conclusion and information, apply comprehension and Knowledge for new and different problem, develop rational and reasonable interpretation, to firm belief and stay opened to new information, method, work system, value and beliefs and by assimilating information.

Knowledge is everything to be known; intelligence or everything to be known pertaining to learning subject (Sugono, et al., 2008). Such definition may be interpreted that such knowledge is everything existing in our mind. Whereas, Drucker (1999) defined knowledge as information which may change anything or individual, it occurs when such information as base for acting or when such information empowering individual or institution to get action previously. However, knowledge may be interpreted as actionable information or it may be used as base for acting, to make decision and to take certain direction or strategy. Similar with definition revealed by Drucker but it may be understood more easily, ie, definition revealed by Sveiby (1997) that knowledge as capacity to act.

Experience and information we have or hear from other individual will become very valued knowledge resource, additionally, knowledge may be obtained from tradition as well, furtherly, Notoatmodjo (2010) added that knowledge also may be obtained from history. Knowledge is debating issue or problems of epistemology philosophers which may satisfy three criteria those are: right/correct, has a basis and provable. Furthermore Notoatmodjo (2003) said that there are two ways for obtaining knowledge; By science knowledge and by non science knowledge. Frequently, by non science knowledge obtained from: a) *trial and error*, b) accidentally, c) by authority, d) based on personal experience, e) by common sense, truth by inspiration, f) truth by intuitive, g) by mindset, h) induction and i) deduction. Whereas, by science knowledge, it is conducted by scientific research method, ie, knowledge finding/discovery by systematic, logic and scientific observation. Most of human knowledge may be obtained by visual and audio sensory.

Then, if we view from educational side, such knowledge is highly influenced by education, those two side has close relation. It means the higher education level of individual the higher his/her capability. Other than educational factor, age and experience factors also has large influence against knowledge. Exactly, any individual agree to had been said by Nursalam (2001) that in line with the increasing of age, then, strength and maturity level of individual will be better either in such thought or belief either for own self or other self and conversely. Similarly, it had been revealed by Ahmadi & Prasetya (1997) as well stating the older of individual the weaker/lower of his/her thought power.

Knowledge has some levels, those are: a) *to know*; the capability of individual in memorizing and remembering as well as recalling, 2) *to comprehend*; capability of individual to clarify anything correctly, c) *to apply*; capability of individual to apply what had been known in real life, d) *to analyze*; capability of individual to analyze anything based on truth consideration and values, e) *to synthesis*; capability of individual to connect fraction as intact part f) *to evaluate*; capability of individual to evaluate to anything.

Davenport et.al (1988) clarified the general target of knowledge management system in practice as follows: a). To create knowledge: Knowledge created in line with human how determine new way in doing or creating know-how, sometimes, external knowledge eksternal brought into organization/ institution; 2). To catch knowledge: new knowledge identified as valued one and presented in any reasonable and digestible one; 3). To encompass knowledge: new knowledge should be put into context to be actioned. It indicates human depth (tacit quality) to be caught with explicit facts simultaneously; 4). To store knowledge: Beneficial knowledge should be stored in good format to knowledge storage, so that, other individual(s) in organization may access or use it; 5). To manage knowledge: As any library, knowledge should always be up-to-dated. It should be reviewed in order to clarify is such knowledge relevant or accurate; 6). To disseminate knowledge: knowledge should always be available in beneficial format for other individual(s) or organizational member who require such knowledge will be on hand whenever and wherever.

Experience is any event felt, undergone and born by individual in his/her life. Similarly, also it had been revealed by Siagian (2002), that Experience is learning quoted by individual from events in his/her life journey. Experience is the best teacher, precisely and frequently, we heard such statement. Based on what had been contained in experience, it has two following meanings: As part of event or accident from passing life journey. The stressing is that such experience is any accident or event impinges such self individual or other individual. Subsequently, if it is viewed from side of impinged individual based on self own experience and experience from other individual side.

Self own experience is the best teacher which may be described as accident or event occurring at passing time impinging our self own but not to others, then, based n such accident/event we make it as learning or warning toward next life journey. Obviously, by understanding such event/accident whether or not pleasure indeed, it had occurred to our selves and not impinging to other individual, and only our selves feel and bear such consequences. Subsequently, refer to such unpleasure accident/event it will be our foundation to get a wisdom that we should act and say carefully, to plan prior to step forward maturely and reconsider accurately. Without

planing and consideration to determine life steps, then, possibly, we will be fallen to buried and unpleasure life. Whereas, in terms of pleasure event/accident we will get wisdom to follow our steps prior pleasure life arrive at us continuously and consistently. We should learn to understand life by learning and getting wisdom from accident/event impinging us. Then, when impinging us is any pleasure object then, it is not problem, because it had been suitable to our previous wishing. And conversely, when anything impinging us is not pleasure object and even painful then, it will be always planted in our mind as long as it had not been released from our selves.

Other individual experience is the best teacher, then, the thought existing in our mind is that We see, hear, attempt to feel what other individual felt in sympathy and empathy level in accordance with our capability. Hence, the meaning from revealance of other individual experience is the best teacher, it means any accident/event having impinged other invidual then, we learn from such experience as our provision in sailing through our selves life journey.

In other word, entirely, such event/accident had not impinged our selves or even undergo/feel it. When anything impinging us is a pleasure one then, it is not problem and will be motivation and learning on how to achieve our selves wishing by learning from other individual experience. When anything impinging us is unpleasure one then, it is our luck which may learn from other individual experience prior such unpleasure anything impinges our selves.

Hence, We will be care and alert in responding and getting our further steps. We always attempt to prepare and plan in better so as to prevent from painful adversity.

Firmly, it is difficult to give meaning or definition for term *Common Sense*. According to Moore (2011), although he is recognized as *Common Sense epistemology*. But, he had not given limitation on such terminology. Because such *Common Sense* is simple and undefinable one.

Historically, thought regarding this common sense had been commenced since the emerging discussion on human knowledge. Such thought commenced by well known philosopher, Plato. It is caused the pilosophy before Plato era more had been focused on universal essence. For Plato *Common Sense* is *Common Opinion*, ie knowledge as perception result of common (the man in the street). Any object absorbed by subject directly which of character is simple, it was only illustration (copy) of actual and real object. Subject supposed that such individual knowledge had arrived at real truth. Plato had not denied existence of such knowledge type, but, Plato place it as the lowest knowledge so called Eikasa knowledge. This knowledge type is object representing material objects shadows. Subject only recognize object shadows. The real knowledge object is in idea world.

It is different with other Yunani Philosopher, Aristoteles, Plato's teacher. For Aristoteles *Common Sense* or *Communis Sensus* is *faculty/capability* existing in human self representing main capability to decide any knowledge on concrete reality which of character may be sensed by most individuals *Common Sensible*. Directly, object realized by subject. Subject absorbed by sensory. For Aristoteles just by sensory the absorbed object will become provable knowledge.

In English, the empirisme thinker or epistemological realism followed trace of Francis, et. al. (1967) having put foundations of inductive thinking. *Common Sense* according to Bacon is common belief contradicted with special object logically, it may be understood by inductive conclusion. Inductive conclusion should be conducted in order that knowledge will be hindered from mistakes as result of misguided thought. Supposedly, by Bacon such misguided thought called *idols*. Those are *the idols of the tribe, the idols of the cave, the idols of the market, and the idols of the theatre*. (Organun, 1967).

Other English thinker such as Berkeley. Berkeley had put knowledge foundation on human thought (mind). It occurs as result of thought pressure. Knowledge is illustration on object representing idea of sensory absorption. Object may be sensed. *Common Sense* is any human capability to obserb real object representing the appearance of object absorbed by sensory on pressure of mind or thought. Knowledge of *Common Sense* is knowledge owned by most of human on reality, hence, it is not real idea, because it had not indicated accountable evidence.

Thomas Reid, philosopher from Scotland including ring of UK tradition had developed his philosophy based on *Common Sense*. He had inspired Moore to develop *Common Sense epistemology*. According to Reid, knowledge is experience accumulation by simple apprehension. Knowledge evidence is highly depended on evidence of sensing action, storing in memory and imagination. Knowledge evidence is very depended on correlation between object and subject, because such knowledge has pure and accurate nature. Solely, evidently Knowledge is not reasoning but it is derived from *Common Sense*. *Common Sense* according to Reid is universal belief against experience reasoning settling in simple apprehension.

Francis Herbert Bradley and George Edward Moore Bradley are idealist philosophers in which Hegelianistic as attacking target of George Edward Moore who revive realism in English. According to Bradley. *Common Sense* is perception on universal or absolute issues revealed by not actual perception appearance. Knowledge is such universal appearance.

Moore developed his philosophy resting on *Common Sense*. Moor Epistemology developed based on Hume epistemology, whereas, concept of *Common Sense* is contradicted with philosophy of Reid. According to



Moore, knowledge is sensory absorption against material object which of result representing data-sensory. Direct apprehension against data-sensory involving awareness activity will bring about Knowledge of *Common Sense*.

Hence, *Common Sense* by Moore (2011) is any integrated capability between sensing activity and awareness activity on direct material object. This capability result in universal belief because, external world object should and may be known commonly and universally, because external world object should be known commonly and universally. Also Universal as result of its existence always and nearly had not undergone changes.

However, it may be concluded that common sense is comprehension and capability to think and act by proper way(s) to make a good decision.

### 3. Research Method

As to research method used in this research is correlation one. It is conducted in Christian University of Indonesia at Medical Faculty precisely, which of 72 students had been elected as research sample from total population of 250 students who actively attended Medical Education Program of 2011/2012. This research had been conducted for six months from August 2014 through January 2015, applied sampling technique is *random sampling technique*. Instrument used in this research is *questionnaire* comprising 34 questions, and the data analyzed by Skewness and Kurtosis test.

### 4. Result and Discussion

Firstly in this section will be described data obtained by research instrument. Instrument of Knowledge (X1) variable which had been tested were 8 statements, upon trial test there was 1 *false* and it remains 7 valid statements. Instrument of Experience (X2) variable which had been tested were 6 statements, upon trial test there was 1 *false* and it remains 5 valid statements, and instrument of Common sense (X3) variable which had been tested were 8 statements, upon trial test there was 1 *false*, and it remains 7 valid statements.

For instrument of Critical thinking of Students of FK. UKI (Y) variable which had been tested were 20 statements, upon trial test there was 1 *false*, and it remains 15 valid statements.

From results of reliability test variable as pointed in following table had been found that: Knowledge (X1) where  $t - \text{critical} = 0.60$  It means that Alpha - Cronbach ( $\alpha$ ) = 0.83, it means that variable (X1) is reliable and it may be used as instrument in this research. Experience (X2) dimana  $t - \text{critical} = 0.60$  whereas Alpha - Cronbach ( $\alpha$ ) = 0.71, it means that variable (X2) is reliable layak it may be used as research instrument. Critical thinking variable of Students of FK. UKI (Y) where  $t - \text{critical} = 0.60$  whereas Alpha-Cronbach ( $\alpha$ ) = 0.91, it is reliable and it may be used as research instrument.

Table 1: Reliability as Instrument

Variable	Knowledge(X1)	Experience (X2)	Common sense (X3)	Critical thinking of FK.UKI Students (Y)
Alpha – croncbach ( $\alpha$ )	0.83	0.71	0.91	0.91
t-critical	0.60	0.60	0.60	0.60
Reliability ( $\alpha > t - \text{critical}$ )	<i>Reliable</i>	<i>Reliable</i>	<i>Reliable</i>	<i>Reliable</i>

The data described in this research summarized in following table:

Table 2: Analysis Requirement Test Analysis

Var	Min Score	Max Score	Std.Dev	Re- Rata	Median	Modus
Y	38.00	58.00	4.7380	46,20	46.00	46.00
X1	17.00	27.00	2.3113	21.40	21.00	22.00
X2	9.00	20.00	2.3113	14.47	15.00	15.00
X3	8.00	28.00	3.8545	20.95	21.00	21.00

Such analysis requirement is that should be satisfied in order to conduct regression analysis, either for prediction or hypothetical test requirements. There are three requirements should be satisfied for regression analysis, either *simple regression* or *multiple regression*, those are: (1) normality test (*Skewness and Kurtosis test*), (2) homogeneity and linearity requirements. Normality requirement test conducted by SPSS version 17.0.

Table 3. Skewness and Kurtosis Test

Variable	n	Skewness Std. Error	Kurtosis Std. Error	Ratio "p"	Normality -2<"p">2
Y = critical thinking of FK.UKI	72	0.283	-0.334	-0.051	Normal
X1= Knowledge	72	0.283	-0.334	-0.051	Normal
X2= Experience	72	0.283	-0.334	-0.051	Normal
X3= Common sense	72	0.283	-0.334	-0.051	Normal

Skewness and Kurtosis Test is for data normality: when ratio std. Error Skewness and std. Error of Kurtosis = "p" = -0.051 existing between -2 dan +2, then, it may be stated has normal distribution.

Based on homogeneity and linearity test in following table then, it may be clarified as follows:

Table 4: Homogeneity and Linearity of Data Y against X1

			Sum of Squares	df	Mean Square	F	Sig.
Critical thinking * Knowledge	Between Groups	(Combined)	230.547	10	23.055	1.032	.428
		Linearity	118.439	1	118.439	5.299	.025*
		Deviation from Linearity	112.108	9	12.456	.557	.826
Within Groups			1363.328	61	22.350		
Total			1593.875	71			

\*Significant; Linearity is satisfied (0,025<0,05)

Table 5 : Homogeneity dan Linearitas Data of Y against X2

			Sum of Squares	Df	Mean Square	F	Sig.
Critical thinking* Experience	Between Groups	(Combined)	447.054	11	40.641	2.126	.032
		Linearity	323.258	1	323.258	16.912	.000**
		Deviation from Linearity	123.796	10	12.380	.648	.767
Within Groups			1146.821	60	19.114		
Total			1593.875	71			

\*\*Significant; Linearity is satisfied

Table 6: Homogeneity dan Linearitas Data of Y against X3

			Sum of Squares	df	Mean Square	F	Sig.
Critical thinking * Common sense	Between Groups	(Combined)	659.105	17	38.771	2.240	.013
		Linearity	85.674	1	85.674	4.949	.030*
		Deviation from Linearity	573.431	16	35.839	2.070	.024
Within Groups			934.770	54	17.311		
Total			1593.875	71			

\* Significant: Linearity had not been satisfied (0.030<0,050)

Based on homogeneity test with SPSS version of 17.0, it may be concluded that data derived from homogenous and linear population.

#### Hyphotesis Test

#### 1. First Hyphotesis Test; Correlation Between Knowledge (X1) and Critical thinking Students of FK. UKI (Y).

Statistical Analysis of simple correlation between Knowledge (X1) and Critical thinking Students of FK. UKI (Y). It is indicated by equation of Y regression = 34.249 + 0.559 X1 based on following table.

Table 7: Simple Regression between Knowledge (X1) and Critical thinking of Students of FK. UKI (Y)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	34.249	5.074		6.750	.000
Knowledge	.559	.236	.273	2.370	.021

a. Dependent Variable: Critical thinking (Y)

Based on significance Test and Regression Linearity Test above it may be concluded that regression equation of  $Y = 34.249 + 0.559 X1$  is linear and significant. Such equation indicates that any increasing of 1 score of *Knowledge* (X1) it result in the increasing of (0.559) *Critical thinking* Students of F.K. UKI(Y).

Table 8: significance Test of correlational coefficient between Knowledge (X1) and Critical thinking Students of FK. UKI (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.273 <sup>a</sup>	.074	.061	4.59104

a. The independent variable is: (Constant), Knowledge

b. Dependent Variable: Critical thinking of FK.UKIstudents (Y)

Correlational coefficient between Knowledge (X1) and Critical thinking Students of F.K. UKI(Y) is 0.273 whereas correlation strength between Knowledge (X1) and Critical thinking Students of F.K. UKI(Y) is indicated by correlation determination coefficient  $r^2 = 0.074$ , it means that correlational strength of 7.40% of Y variable variation may be clarified by variable X1. Significance test of such correlational coefficient as indicated in following table.

Table 9: First Hypothesis Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	118.439	1	118.439	5.619	.021 <sup>a</sup>
Residual	1475.436	70	21.078		
Total	1593.875	71			

a. Predictors: (Constant), Knowledge (X1)

b. Dependent Variable: Critical thinking FK.UKI's students (Y)

Hence, it may be concluded that first hypothesis is very significant because significancy degree based on table above, it will be obtained  $0.021 < 0.05$ .

## 2. Second Hypothesis Test; Correlation between Experience (X2) and Critical thinking of Students of FK. UKI (Y).

Statistical Analysis of simple correlation between Experience (X2) and Critical thinking Students of FK. UKI (Y). It is indicated by regression equation of  $Y = 33.388 + 0.886 X2$ , it is based on following table.

Table 10: Simple Regression between Experience (X2) and Critical thinking Students of FK. UKI (Y)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	33.388	3.079		10.843	.000
Experience	.886	.210	.450	4.220	.000

a. Dependent Variable: Critical thinking(Y)

Based on significance test and regression linearity test above it may be concluded that regression equation of  $Y = 33.388 + 0.886 X2$  is linear dan significant. Such equation indicates that any increasing of 1 score of *Experience* (X2) resulting in increasing of (0.886) *Critical thinking* Students of F.K. UKI(Y).

Table 11: Significance test of correlational coefficient between Experience (X2) and Critical thinking Students of FK. UKI (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.450 <sup>a</sup>	.203	.191	4.26048

a. Predictors: (Constant), Experience

b. Dependent Variable: Critical thinking of FK.UKI's students (Y)

Correlational coefficient between Experience (X2) and Critical thinking Students of F.K. UKI(Y) is 0.450 whereas correlational strength between Experience (X2) and Critical thinking Students of F.K. UKI(Y) is indicated by correlational determination coefficient of  $r^2 = 0.203$ , it means that correlational strength of 20.30% of variable Y variation may be clarified by variable X2. Significance test of such correlational coefficient as indicated in following table.

Table 12: Second Hypothesis Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	323.258	1	323.258	17.809	.000 <sup>a</sup>
	Residual	1270.617	70	18.152		
	Total	1593.875	71			

a. Predictors: (Constant), Experience (X2)

b. Dependent Variable: Critical thinking

Hence, it may be concluded that Second Hypothesis is very significant as result of significance degree based on table above it had been obtained  $0.000 <$  from test significance of 0.05 and 0.01.

### 3. Third Hypothesis Test; Correlation between Common sense (X3) and Critical thinking Students of FK. UKI (Y).

Statistical Analysis of simple correlation between Common sense (X3) and Critical thinking Students of F.K. UKI(Y), it is indicated by regression equation of  $Y = 40.235 + 0.285 X3$  based on following table.

Table 14: Simple Regression between Common sense (X3) and Critical thinking Students of FK. UKI (Y)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	40.235	3.045		13.214	.000
Common sense	.285	.143	.232	1.994	.050

a. Dependent Variable: Critical thinking (Y)

Based on significance test and regression test above, it may be concluded that regression equation of  $Y = 40.235 + 0.285 X3$  is linear and significant. Such equation indicates that any increasing of 1 score of *Common sense* (X3) it results in increasing of (0.258) *Critical thinking* Students of F.K. UKI(Y).

Table 14: Significance test of correlational coefficient between Common sense (X3) and Critical thinking Students of FK. UKI (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.232 <sup>a</sup>	.054	.040	4.64174

a. Predictors: (Constant), Common sense (X3)

b. Dependent Variable: Critical thinking FK.UKI's students (Y)

Correlational coefficient between Knowledge Common sense (X3) and Critical thinking Students of F.K. UKI(Y) is 0.232 whereas correlational strength between Common sense (X3) and Critical thinking Students of F.K. UKI(Y) is indicated by correlational determination coefficient of  $r^2 = 0.054$ , it means that correlational strength of 5.40% of variable Y variation may be clarified by variable X3. Significance test of such correlational coefficient as indicated in following table.



Table 15: Thirty Hypthotesis Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.674	1	85.674	3.976	.050 <sup>a</sup>
	Residual	1508.201	70	21.546		
	Total	1593.875	71			

- a. Predictors: (Constant), Common sense (X3)  
 b. Dependent Variable: Critical thinking(Y)

Hence, it may be concluded that Third Hypthotesis is significant as result of significance degree based on table above it had been obtained  $0.050 \leq$  from test significance is 0.050.

#### 4. Fourth Hypthotesis Test; Multiple Regressional Correlation of Knowledge (X1), Experience (X2), and common sense (X3) and Critical thinking Students of FK. UKI (Y) jointly.

Correlational statistic Analysis between Knowledge (X1), Experience (X2), and common sense (X3) Critical thinking Students of F.K. UKI(Y) jointly, it is indicated by following regressional equation:  $Y = 22.264 + 0.373 X1 + 0.739 X2 + 0.251 X3$ , as had been indicated in table 16 below.

Table 16: Regresion between Knowledge (X1), Experience (X2), Common sense (X3) and Critical thinking Students of FK. UKI (Y) jointly.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
1 (Constant)	22.264	5.659		3.935	.000
Knowledge (X1)	.373	.224	.182	1.667	.100
Experience(X2)	.739	.215	.376	3.436	.001
Common sense(3)	.251	.129	.204	1.941	.056

- a. Dependent Variable: Critical thinking

Table 17: Significance test of Multiple correlational coefficients between Knowledge (X1), Experience (X2), dan Common sense (X3) and Critical thinking Students of FK. UKI (Y) Jointly.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.516 <sup>a</sup>	.266	.234	4.14715

- a. Predictors: (Constant), Common sense (X3), Knowledge (X2), Experience (X1)  
 b. Dependent Variable: Critical thinking (Y)

Based on significance test on Table 17 above then, it may be concluded that Correlational coefficient between Knowledge (X1), Experience (X2), dan Common sense (X3) and Critical thinking Students of FK. UKI (Y) jointly is correlational determination coefficient of  $r_{y1,2,3} = 0.234$ , it means that correlational strength is 23.40%. Variable Y may be clarified by variable X1, X2 and X3, whereas, its residue influenced by other variable beyond this research.

Table 18: Fourth Hypthotesis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	424.352	3	141.451	8.224	.000 <sup>a</sup>
	Residual	1169.523	68	17.199		
	Total	1593.875	71			

- a. Predictors: (Constant), Common sense(X3), Knowledge(X2), Experience(X1)  
 b. Dependent Variable: Critical thinking (Y)

Based on Table 18 above, then, fourth is very significant. It means there is positive correlation between Knowledge (X1), Experience (X2), and Common sense (X3) and Critical thinking Students of FK. UKI (Y) jointly, based on table above, significance degree is  $0.000 <$  degree of test significance is 0.05 or even 0.01, it means correlation is very significant.

Based on ranking of partial correlational coefficient between Knowledge (X1), Experience (X2), and Common sense (X3) and Critical thinking Students of FK. UKI (Y) jointly, it may be determined by strongest correlation between independent variable and dependent variable as indicated by following table.

Table 19: Rank of Partial Correlation

Correlational coefficient Partial	Rank
r1.2 = 0,546	First
r1.3 = 0,260	Second
r1.1 = 0,139	Third

From table 19 above it may be known that correlational ranking between independent variable and dependent variable is as follows: First rank, Experience (r1. 2) is 0.546; and Second Rank, (r1.3) is 0.260 and lastly, Common sense (r1.1) is 0.139.

### 5. Conclusion And Suggestion

From all analyses may be concluded that there is positive correlation between Knowledge and Critical thinking of Students of FK. UKI, there is positive correlation between Experience and Critical thinking of Students of FK. UKI, there is positive correlation between Common sense and Critical thinking of Students of FK. UKI, and there is positive correlation between Knowledge, Experience, Common sense and Critical thinking of Students of FK. UKI.

Hence, it will be suggested in order that this research may be used for development of critical thinking Students of FK. UKI more. This research should be continued by other new research by adding variables which may increase Critical thinking of FK. UKI's students in better and research of FK to be more increased and supported by sufficient time and fund/budget adequately.

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