

# CRITICAL THINKING SKILLS OF TRAINEES OF POLICE INSTITUTIONS IN NIGERIA: ROLE OF TRAINEES' AGE AND GENDER

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## Abstract

*This study explored the role of age and gender in the critical thinking skills of trainees of Police institutions in Nigeria. The design adopted for this study was a descriptive survey design. The population of this study was 14,320 police trainees enrolled in various police training institutions in Nigeria. The random proportionate sampling strategy was used to select 375 respondents from the six (6) police training institutions comprising both male and female trainees. The instrument used to collect data for this study was the "Owolabi Critical Thinking Test (OCTT) (2011)" which is a standardised test. The reliability of the OCTT was established at 0.71 using the Cronbach's alpha. Three research questions and two null hypotheses were raised to guide the study. In this study, mean scores and percentages were used for the analysis of the research questions. The hypotheses were tested at 0.05 level of significance using t-test. The findings showed poor critical thinking ability among trainees. The study also found that there was no significant difference between male and female trainees in their critical thinking ability. However, it was established that age played a significant role in the critical thinking ability of trainees. It is therefore recommended that designers of the programme for training institutions in the Nigerian Police should infuse elements of critical thinking in the curriculum to ensure that graduates are exposed to this critical skill. The curriculum for police training should be redesigned to cater for age differences. Gender had no influence on critical thinking of trainees; therefore, any discriminatory practice along these lines should be discouraged.*

**Key Words:** *Critical Thinking, Age, Gender, Police Trainees*

## Introduction

The functions of the Nigeria Police Force as spelt out in Section 124 of the 1999 Constitution include, protection of lives and property, prevention and detection of crime, maintenance of law and order, apprehension of offenders, due enforcement of laws and regulations which they are directly charged, performance of military duties within and outside Nigeria. Emerging trends of social vices, disorderly behaviours, misconducts, criminal activities, militancy, religious uprisings and terrorism have necessitated corresponding modifications in the training of police officers in an attempt to adapt to new trends and meet the expectations of citizens.

Police training institutions were established in different locations to serve specific purposes. Some train fresh recruits from the society while some employ and train cadet trainees of the rank of Inspectors of Police and Assistant Superintendent of Police. Others were established to provide refresher courses to serving members of the rank and file. Some train serving trainees in special areas such as operations, investigations, intelligence, information and communications technology among others.

The job of Police officers is quite complex requiring skills, sound mind and intelligence to excellently execute. As DuFour (2018) argued, every day, officers interact with suspects, witnesses, or victims. They respond to extremely complex situations that often involve frightened or angry people. To do so effectively, high level critical thinking skills, which are rarely focused on as part of law enforcement training is required. Paul and Elder (2001) described critical thinking as the mode of thinking about any subject, content, or problem in which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. They believe that critical thinkers need sound criteria and standards for assessing their own thinking.

To be proficient in the skills needed to master the job of a police officer, it takes a unique individual, along with special skills that are too often overlooked. Despite this position, people are recruited indiscriminately without assessing their critical thinking ability into the police service. Some of the basis for recruitment includes desperation to get a paid job, federal character requirement and other sundry political considerations.

When a police officer charges a person with a crime they are expected to show probable cause. Probable cause deals with compilation of sufficient evidence to prove beyond reasonable doubt that the offender committed the crime. The officers are supposed to have done this before arrest and prosecution which is rarely the case in Nigeria. In many cases suspects are tried practically in the court of public opinion (media trial), or treated as guilty before they are even charged with any offence which leaves many people with the thinking that the police is a mere tool in the hands of the ruling class. With this tool, perceived opponents or those with opposing views are persecuted rather than prosecuted.

The entire process of police work according to DuFour (2018) is based on forming sound arguments as not forming a sound argument could mean potentially imprisoning the wrong person or coming to the wrong conclusion about the situation. Officers must have well-honed critical thinking skills in order to come to a sound conclusion and then make a bullet-proof argument.

Ennis (2011) in a compilation of several conceptualizations of critical thinking opines that critical thinking can be described as a persistent and skeptical mind-set that always checks for accuracy and searches for potential flaws in the argument. It is argued by DuFour (2018) that critical thinking is an area of forensic science, because of its adherence to the scientific method. The focus of Police education in Nigeria appears to be different from this. Officers appear to lack capacity to look for the flaws in their evidence and reasoning during an investigation. DuFour (2018) concludes that officers who are intelligent, able to think clearly under pressure, and compassionate are going to be effective because they are better able to make good decisions, detect suspicious behaviour, and see through lies.

In an effort to clarify the process of critical thinking, Paul (1995) observed that critical thinking is a unique and purposeful form of thinking that is practiced systematically and purposefully. The thinker imposes standards and criteria on the thinking process and uses them to construct thinking. Elder (2007) defined critical thinking as that mode of thinking about any subject, content or problem in which the thinker improves the quality of his/her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. A well cultivated critical thinker raises vital questions and problems, formulating them clearly and precisely; gathers and assesses relevant information, using abstract ideas to interpret it effectively comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards. He thinks open mindedly within alternative systems of thought, recognizing and assessing as need be, their assumptions, implication and practical consequences and communicates effectively with others in figuring out solutions to complex problems. Dealing with a very diverse population, with significant individual, religious, educational and cultural bias, the police ought to be equipped to respond appropriately to novel situations as they occur on a daily basis. Hence the need to integrate training in critical thinking skills into police training programme.

The men and women of the Police Force no doubt require critical thinking as a component of their training to prepare them for the daunting task of policing the nation. Current trends as it relates to practices of the officers tend to indicate that the capacity to think critically is lacking or to say the least insufficient, which unveils a lacuna in their training programme.

Dwyer and Walsh (2017) observed from teaching undergraduate critical thinking (CT), that students, aged 23 years and over, think they're pretty good at CT. This can be interpreted as meaning that mature students are often overconfident in their ability to think critically. Matured students may exhibit higher boldness in the way that they might engage with the class and speak about their opinions and experiences but to what extent does this confidence translate to CT disposition? In a study by Dwyer and Walsh (2017), performances were compared between younger students who were completing a BA and a blended learning CT module. Mature students performed significantly better over time, in terms of CT ability than younger students.

Dow and Wood (2006) support the position that critical thinking skills are perceived differently according to gender. They conclude that females use critical thinking skills and problem solve as much as males but in a style that is less confrontational and direct. This is due in part to some physiological difference in cognition but largely through the effect of culture. Walsh and Hardy (1999) found that in a comparison of gender from Facione's California Critical Thinking Disposition Inventory (CCTDI), females scored higher than males on the CCTDI in open-mindedness and maturity. A study regarding gender and problem solving administered under the auspice of PISA (Programme for the International Student Assessment) by the Organisation for Economic Cooperation and Development (2009) found that gender differences in problem solving for adolescents were few and insignificant.

In view of the relevance of critical thinking as an important variable in police education, this study looked at the influence of age and gender on the critical thinking ability of trainees in order to establish the place of training/education in imparting knowledge of critical thinking. This is significant because effective training for individuals in the police profession should focus on building their critical thinking skills.

### **Theoretical Framework**

Stage Theory by Elder & Paul (2001) made the following assumptions: (1) that there are predictable stages through which every person who develops as a critical thinker passes, (2) that passage from one stage to the next is dependent upon a necessary level of commitment on the part of an individual to develop as a critical thinker, is not automatic, and is unlikely to take place “subconsciously,” (3) that success in instruction is deeply connected to the intellectual quality of student learning, and (4) that regression is possible in development.

In appreciating the Stage theory which is developmental in approach a working definition is paramount. Elder and Paul (2001) defined critical thinking as: the ability and disposition to improve one’s thinking by systematically subjecting it to intellectual self-assessment. It is important to recognize that on this view, persons are critical thinkers, in the fullest sense of the term, only if they display this ability and disposition in all, or most, of the dimensions of their lives (e.g. as a parent, citizen, consumer, lover, friend, learner, and professional). They exclude from their concept of the critical thinker those who think critically in only one dimension of their lives. They argued that this is because the quality of one’s life is dependent upon high quality reasoning in all domains of one’s life, not simply in one dimension.

### **Implications of the theory**

Elder and Paul (2001) believe that the thinking of students will remain "invisible" to them unless they are supportively challenged to discover the problems in their thinking. This is not possible unless they receive careful introduction into the intellectual workings of the human mind. Thus, it is vital that an intellectual vocabulary for talking about the mind be established for teachers; and that teachers lead discussions in class designed to teach students, from the point of view of intellectual quality, how their minds work, including how they can improve as thinkers. Of course, teachers need to take students through stages of intellectual development.

In conclusion, there are many ways to teach content so that trainees may progress as thinkers. However, if we are to do so, we must explicitly focus on the mind intellectually and grasp the stages that learners must progress through. Trainers and trainees must recognize that we all develop incrementally as thinkers, and that the progress of any one of us is directly dependent on our level of intellectual knowledge and commitment. Put another way, if I am to develop my critical thinking ability I must both "discover" my thinking and must intellectually take charge of it. Why is this so important? Precisely because the human mind left to its own, pursues that which is immediately easy, that which is comfortable, and that which serves its selfish interests. At the same time, it naturally

resists that which is difficult to understand, that which involves complexity, that which requires entering the thinking and predicaments of others.

Among the previous studies is one of the indigenous studies carried out by Okunuga & Busari (2010) on 'Teaching and Assessment of Critical Thinking in Higher Education: Case Studies of South Western Universities in Nigeria' observed that critical thinking can be taught and assessed in the South-Western Federal Universities. Olawuyi, Olasehinde Williams, Durosaro and Yahaya (2011) studied "Critical Thinking and Higher Education in Nigeria." This study attempted a sensitization of the stakeholders of critical thinking, the characteristics of critical thinkers and the need for the implementation of critical thinking at all levels of education and the principles of, implementation. Most of the previous studies reviewed were on the variables of critical thinking and higher education in Nigeria. Previous studies thus did not examine nor research on critical thinking ability and how age and gender play intervening roles. This study, therefore, analyzed the critical thinking ability of police trainees and the age and gender implications.

### **Statement of the Problem**

The police profession bears some uniqueness in function. The law allows the officers to bear arms, take away a person's liberty, make life/death decisions in execution of force order 237, create legal documents, prosecute cases, resolve disputes and save lives and properties on a daily basis. In addition, officers respond to burglar alarms, enforce traffic laws, arrest suspects, carry out investigations, rescue victims, and recover stolen properties, among others.

In attempting to identify, manage and mitigate these crimes, critical thinking is fundamental in order to conceptualize, analyse, synthesize, evaluate and implement decisions at the spur of the moment. In Nigeria, multiple cases of irrational actions on the part of the Police have been reported leading to unwarranted injuries or even deaths that are extra-judicial in nature. The average Nigerian Policeman is usually perceived in very bad light. Members of the public often deride them and question their sense of judgement. There appear to be a crisis of confidence in the Police and this does not augur well for peaceful co-existence of the country. This observed failure of the Police to meet desired expectation is perhaps traceable to some vital but missing component in police education curriculum among which is inculcation of critical thinking aptitudes.

Additionally, the police profession faces new, unique and complex problems in today's technologically advanced society. Crime and criminality is fast changing from simple to complex resulting in emerging trends of violent crimes such as terrorism, kidnapping, civil unrest, religious bigotry, cattle rustling, armed robbery, and politically related offences. These crimes require some level of literacy on the part of the police to think critically and create acceptable strategies to mitigate and combat them on daily bases in different locations in Nigeria. This study is therefore predicated on the need to assess the extent of preparedness of the trainees for this task in terms of their critical thinking equipment.

To guide the conduct of this study, the following research questions were raised:

1. What is the level of critical thinking among trainees of police colleges?
2. What are the variations in trainees' critical thinking ability due to their gender?
3. How does trainees' critical thinking ability vary with their age?

The two null hypotheses that guide this study are: there is no significant difference in trainees' critical thinking ability due to their gender and there is no significant difference in trainees' critical thinking ability due to their age.

The study was carried out among recruits of Nigerian Police Colleges cutting across the six geopolitical zones of Nigeria.

### **Methodology**

The design adopted for this study was a descriptive survey design. The population of this study is police trainees enrolled in various police training institutions in Nigeria. The total number of such trainees as at 2016 was 14,320. Using the sampling table by Krejcie and Morgan (1970), a sample size of 375 respondents were selected from the six (6) police training institutions comprising both male and female trainees. The random proportionate sampling strategy was used to ensure that the size of the sample taken from each geopolitical zone from the following police training institutions is proportionate to the size of the population.

The instrument used to collect data for this study is the Owolabi Critical Thinking Test (OCTT). The OCTT instrument was originally designed to collect data on undergraduate's critical thinking ability in Nigerian universities. The OCTT was adapted to the peculiar situation of the Police trainees by rewording some items and removing irrelevant ones. The OCTT has 23 items and has a Test Answer Format. In scoring the critical test instrument, right or wrong answers format was used where right answer attracts one (1) mark and a wrong answer attracted no mark (zero).

The OCTT is a standardised test. However, due to the modifications made to the OCTT, further test of reliability was needed by the present researchers. The split-half method of reliability was adopted using 20 respondents from a training school that did not participate in the main the study. The data collected was analysed using the Pearson's Product Moment Correlation statistics and yielded a reliability index of 0.76.

The collected data was subjected to analysis using descriptive and inferential statistics such as mean and t-test for independent samples.

### **Results**

Research Question One: What is the level of critical thinking among trainees of police colleges?

**Table 1: Level of Critical Thinking of Trainees of Police Colleges**

<b>Critical Thinking Ability</b>	<b>Levels</b>	<b>Frequency</b>	<b>Percentage</b>
Evaluation of Arguments	Poor	181	48.27
	Good	194	51.73
	<b>Total</b>	<b>375</b>	<b>100.00</b>
Recognizing Assumptions	Poor	285	76.00
	Good	90	24.00
	<b>Total</b>	<b>375</b>	<b>100.00</b>
Test of Inference	Poor	175	46.67
	Good	200	53.33
	<b>Total</b>	<b>375</b>	<b>100.00</b>
Overall Critical Thinking Ability	Poor	239	63.73
	Good	136	36.27
	<b>Total</b>	<b>375</b>	<b>100.00</b>

Table 1 indicates the level of critical thinking of trainees in Police Colleges in Nigeria as grouped in three segments of critical thinking. These are evaluation of arguments, where 181 (48.27%) of the trainees were poor while 194 (51.73%) were good. In recognizing assumptions, 285 trainees (76.00%) were poor while 90 (24%) were good. The results also show that 175 trainees (46.67%) were poor in test of inference while 200 (53.33) were good.

In overall critical thinking ability, the data analysis revealed that 239 (63.73%) trainees were poor while 136 (36.27%) were good in critical thinking ability. Critical thinking ability among police trainees in this study is therefore poor.

H<sub>01</sub>: There is no significant difference in trainees' critical thinking ability due to their gender.

**Table 2: t-Test Results on Difference between Critical Thinking Ability of Male and Female Trainees**

<b>Sex</b>	<b>Number</b>	<b>Mean</b>	<b>S.D.</b>	<b>t-value</b>	<b>df</b>	<b>t-crit.</b>
Male	297	8.14	1.86	0.41	373	1.96
Female	78	8.05	1.10			

The test on Table 2 was carried out to determine whether male and female trainees differed significantly in their critical thinking ability. The calculated t-value of 0.41 was obtained which was not significant since it is less than critical t-test value of 1.96 given 373 degrees of freedom at 0.05 level of significance. This implies that there is no significant difference between male and female trainees in their critical thinking ability.

H<sub>02</sub>: There is no significant difference in trainees' critical thinking ability due to their age.

**Table 3: t-Test Results on Difference between Critical Thinking Ability of Trainees due to their Age Range**

Age Range	Number	Mean	S.D.	t-value	df	t-crit.
18-22	134	7.39	1.27	6.45	373	1.96
23-Above	241	8.53	1.82			

Table 3 show that a calculated t-value of 6.45 resulted as the influence of age range on critical thinking ability of trainees. This calculated t-value of 6.45 is significant since it is greater than the critical t-value of 1.96 given 373 degrees of freedom at 0.05 level of significance. Consequently, it is concluded that there exists significant difference in critical thinking ability of trainees due to age.

### Discussion of Findings

The first finding of this study showed that trainees in Nigerian police Colleges were poor in critical thinking ability. Clearly, interactions of the researchers with trainees underscore this. A breakdown into different segments of critical thinking showed that in evaluation of arguments, 48.27% of the trainees were poor while 51.73% were good; in recognizing assumptions, 76.00% of the trainees were poor while 24% were good. The results also show that 46.67% of the trainees were poor in test of inference while 53.33% were good. However, in overall critical thinking ability, the data analysis revealed that 63.73% trainees were poor while 36.27% were good in critical thinking ability.

This finding supports the findings of Rudd, Baker and Hoover (2000) who observed that the undergraduate Agriculture students scored below 50 (low) in all construct areas indicating that the students do not possess strong disposition towards critical thinking. Also, the finding agreed with that of White and Burke (1994) who discovered that the total critical thinking scores for 123 Senior Level Education Majors in Texas was below national norms indicating poor critical thinking.

There was no significant difference between male and female trainees in their critical thinking ability. This finding agrees with the study regarding gender and problem solving by the Organization for Economic Cooperation and Development (2009) which found that gender differences in problem-solving for adolescents were few and insignificant. Dow and Wood (2006) however support the position that critical thinking skills are perceived differently according to gender. Walsh and Hardy (1999) also found that females scored higher than males on the CCTDI in open-mindedness and maturity.

The present researchers believe that the issue of critical thinking ability transcends gender boundaries which is actually in line with what Halpern (2003) asserted regarding the fact that critical thinking can be learned through gaining life experiences and through teaching it to others. Thus, it is evident that critical thinking is not a matter of gender.

There was significant difference in the critical thinking ability due to their age. Dwyer and Walsh (2017) observed that mature students are often *overconfident* in their ability to think critically. In a bid to empirically establish the nature of this phenomenon, Dwyer and Walsh (2017) showed from actual measurements that mature students performed significantly better over time, in terms of CT ability than younger students. It is therefore safe to conclude that matured students' exhibition of higher boldness in the way that they engage with the class and speak about their opinions and experiences may also translate to higher critical thinking ability disposition.

### **Conclusion and Recommendations**

This study analyzed the critical thinking ability of trainees in Nigerian Police Colleges. Findings from this study showed that the trainees were poor in critical thinking ability. The implication of this finding is that trainees are not generally disposed or do not have the skills to think critically.

This study also concludes that there was no significant difference between male and female trainees in their critical thinking ability. The study also established that age played a significant role in the critical thinking ability of trainees.

In view of the above findings and conclusion, the following recommendations are made:

1. Designers of the programme for training institutions in the Nigerian Police should infuse elements of critical thinking in the curriculum to ensure that graduates are exposed to this critical skill.
2. The curriculum for police training should be redesigned to cater for age differences.
3. Gender had no influence on critical thinking of trainees; therefore, any discriminatory practice along these lines should be discouraged.
4. Finally, the Nigeria Police Force should borrow a leaf from the United States Department of Education and other educational bodies' lofty goals to imbibe the teaching and assessment of critical thinking disposition and skills into the curriculum of recruits and cadet officers' programmes. This will not just be beneficial to the recruits/cadet officers, but the Nigerian Police Force and the nation in general in this twenty-first century and beyond.

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