
Psychosocial Precipitators Of Creativity Among Public Primary School Pupils In Rivers West Senatorial District Of Rivers State

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Abstract

The study investigated psychosocial precipitators of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State. The study adopted a descriptive survey research design. Four research questions and four hypotheses guided the study. The population of the study comprised the entire public primary school pupils in Rivers West Senatorial District numbering 16,127. A sample size of 420 pupils was drawn from the population using stratified random sampling technique. The instrument for data collection was a researcher developed likert scale titled: "Psychosocial Precipitators of Creativity Scale" (PPCS). The instrument was validated by two experts in Measurement and Evaluation and Educational Psychology, Guidance and Counselling Department of Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt. The reliability of the instrument was determined through the test re-test method using Pearson's product moment correlation which yielded a reliability coefficient of .84. The research questions were answered using mean and standard deviation while the hypotheses were tested using independent t-test. The result of the study revealed that the psychosocial precipitators of creativity among the public primary school pupils in Rivers West Senatorial District were; motivation, mastery of experience, school environment and social expectations. The extents to which they precipitated creativity among the pupils differed significantly based on gender. The researcher made some recommendations among which was that; school environments in Rivers West Senatorial District should be made more scintillating and stimulating to foster creativity among pupils in the District.

Key words: Psycho-social, precipitators, creativity

Introduction

Creativity is a crucial psycho-educational variable. It pertains to the generation of nouveau, valuable, and original ideas, ideals, solutions, or products through an imaginative and innovative process. Creativity as a phenomenon of interest subsumes imagination, originality, flexibility, exploration, problem-solving, artistic expression,

idea generation and iteration. Creativity in the view of Stoltzfus, et. al. (2011) involves formulating, composing or inventing something new to solve problems, improve utility or make life easier. By embracing creativity, individuals can unlock new possibilities, foster innovation, and bring unique value to various aspects of life; hence the renewed emphasis on creativity among primary school pupils in our contemporary society.

Conner, et. al. (2016) disclosed that creativity is the cornerstone of human development, responsible for some of the most significant advancements in art, science, and technology. It involves generating new and valuable ideas or solutions, often by thinking outside the box. While commonly associated with the arts, creativity is equally crucial in various fields, including science, business, and everyday problem-solving (Conner et al., 2016). In this study, creativity is conceived as the ability to generate ideas that are both novel and useful to the individual and the society. It is a process that involves the interaction of a person's thoughts and a sociocultural context that evaluates and recognizes the creative product. This process often includes divergent thinking, which is the capacity to explore many possible solutions and think in a non-linear manner.

Robinson (2006) disclosed that in education, fostering creativity is vital for developing critical thinking and problem-solving skills given that the traditional education systems often stifle creativity by prioritizing standardized testing and rote memorization. Dweck (2006) adduced that creativity is not an innate trait limited to a select few; however it can be developed and nurtured. One approach to fostering creativity is through a growth mindset, which is the belief that abilities can be developed through dedication and hard work (Dweck, 2006).

It is worthy of note that educational institutions can cultivate creativity by providing opportunities for experiential learning, encouraging curiosity, and promoting a culture of experimentation and risk-taking. Conner et al. (2016) pointed out that engaging in creative activities has profound benefits for personal well-being. Creative expression can serve as an emotional outlet, helping individuals process feelings and reduce stress.

Primary schools serve as the bedrock of meaningful scholastic growth and development in our society. Nikkola et al. (2020) disclosed that at the primary school level the minds of the learners are usually easily impressionable as it is able to explore boundless learning opportunities given its coincidence with the concrete operational stage of development. Nurturing creativity at the primary school level is ideal as it harnesses the unlimited potentialities of the child. However, it is worthy of note that nurturing creativity at the primary school level is technical given that it requires a shift in the prevalent educational practices and societal values to prioritize curiosity, experimentation, and intrinsic motivation.

Hence the need for the exploration of the psychosocial precipitators of creativity at the primary school level which are not well known at the moment; this underscores the relevance of the study. Holt-Lunstad et al. (2015) disclosed that psychosocial precipitators are events or circumstances that can trigger or exacerbate mental health issues. These factors encompass a wide range of experiences and social contexts that interact with individual psychological processes. Understanding these precipitators is crucial for both prevention and intervention in mental health care (Holt-Lunstad et al., 2015).

The psychosocial precipitators of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State of interest to the researcher include; motivation, mastery of experience, school environment and social expectations.

Stoltzfus, et al. (2011) studied gender, gender role, and creativity. Undergraduate students (136) were assessed with 3 measures of creative ability and a gender role measure to explore relationships between gender, gender role, and creativity. Male participants' performance on the creativity measures generally was better than that of females, with significant differences in 2 specific creativity tasks. Androgynous individuals' creative productions were judged to be superior to those of participants representing other gender role categories. Further analysis revealed the highest levels of creativity in men who strongly identified with feminine gender role characteristics, with androgynous women recording the next highest scores. Undifferentiated men and women, and highly feminine women achieved low creativity scores. Both men and women who reported strongly masculine gender role characteristics surpassed the performance of undifferentiated participants mary school children.

Bayanova and Chulyukin (2017) examined the impact of cultural congruence on enhancing the creative thinking of primary school students. Cultural congruence can be described as a personality trait based on compliance with the rules which a society determines appropriate according to age and culture. 303 respondents participated in this study, of which 293 were primary school students aged 8-10 years ($M=9$, $\sigma\pm 0.5$), and 10 were primary school teachers who worked with these children. The results of this study indicate that children's compliance with the rules of age-specific normative situations — i.e. the level of cultural congruence— correlate, albeit negatively, with expressions of creative thinking. The findings in this study provide further evidence of reasons for enhancing creative thinking in childhood, where cultural congruence and its factors defining the preschool child's compliance with the rules in a normative situation influence the enhancement of the creative thinking of primary school students.

Mangion and Riebel (2023) examined young creators: Perceptions of creativity by primary school students in Malta. Policymakers and employers insist that educational institutions prepare workforce-ready candidates fluent in the application of 21st Century Skills such as creativity. So far, only a few studies have explored the self-perceived creativity of students. The study addressees this gap in literature by providing an understanding of how young students in upper primary feel about themselves as creative beings. Data for the study was collected through an anonymous online survey that 561 students, aged 9–11 years and residing in Malta (EU), completed. In-depth responses were collected from a subset of the original sample made up of 101 students through an anonymous online form containing a set of questions. Data was analysed using regression analysis for the quantitative component and through thematic analysis for the qualitative part. Results indicate that, overall, students in Year 6 felt less creative than students in Year 5. Furthermore, findings show that the type of school attended impacted the students' perception of creativity. From a qualitative perspective, findings led to insights into (i) the interpretation of the term creativity and (ii) the impact of the school environment and how timetabling impacted students' creativity. The findings suggest that the student's perceived creative personal identity and the concrete manifestations that they engage in are influenced by environmental factors.

Mahama et al. (2023) studied predictive abilities of curiosity, creativity, and motivation on academic performance of high school students in Ghana. The study looked at how learners innate possessions (motivation, curiosity and creativity) affect their performance (science and mathematics). A total of 568 high school students were surveyed through a quantitative-correlational research design. Data for the study were gathered using an adapted curiosity measure, an adapted creativity measure, an adapted motivation measure, and an expert-developed academic performance measure. Multiple multivariate was used to test the hypothesis. The study revealed that students' motivated behaviors, curious abilities, creative potentials jointly explained 15.5% change or variance in science score and 33.1% change or variance in mathematics score. In this sense, it is evident that students' who become curious, creative, and motivated in their learning situation could improve upon their academic performance and achieve their academic goals.

Nikkola et al. (2020) examined children's creative thinking abilities and social orientations in Finnish early childhood education and care. The study was part of a larger study called Progressive Feedback (blogs.helsinki.fi/orientate), which is an early childhood education and care (ECEC) research and development project. The aim of the study was to find out (a) how children's tested creative thinking abilities, fluency, originality and imagination correlated with children's social orientations in kindergarten and (b) how children's participative orientations occur in relation with the teacher and peers. The data consist of Reunamo's child interview tool and the Thinking Creatively in Action and Movement (TCAM) test. The data (280 children from 23 kindergartens and pre-primary schools) were gathered from two municipalities in southern Finland. The results show that the participative orientation was strongly connected with creative thinking abilities, but it was rare in social situations concerning adults. In participative orientation, children concern the situation and intend to change it.

Kadyirov et al. (2024) examined effects of motivation on creativity in the art and design education. Creativity plays a vital role in enhancing students' performance in art and design education. The impact of motivation on education is a vital aspect that educators must take into account to promote the creativity of students. Therefore, the study aimed to explore the effect of students' motivation on their creative activities in Russian art and design education, and simultaneously validate the self-developed Motivation for Creativity Questionnaire (MCQ). The study involved 193 Russian undergraduate students from Kazan Federal (Volga Region) University. The results from EFAs and construct validity measures stated that the developed questionnaire could reliably measure the factors of students' motivation and creativity in Russian art and design education. The intrinsic motivation had a positive significant impact on students' creative performance of divergent thinking, originality of ideas, persistent attitude, and intellectual risk-taking. Achievement motivation also had significant and positive effects on students' creativity: divergent thinking, originality of ideas, persistent attitude, and intellectual risk-taking. This study suggested that educators in Russian art and design education can promote students' creative performance by nurturing both intrinsic and achievement motivations, focusing on areas such as divergent thinking, originality of ideas, persistent attitude, and intellectual risk-taking.

Sharma (2016) studied the effect of school and home environments on creativity of children. A sample of 200 ninth class adolescents students from 100 government and 100 private schools was drawn from Chandigarh city of India. The study revealed that government school students of Chandigarh city have higher creativity except in

elaboration as compared to private school students. The mean scores also show that the girls as compared to boys have higher level of creativity. The significant t-values show that the creative stimulation, cognitive environment dimensions, permissiveness dimensions of school environment effects the creativity of school children to a certain extent. There also exists a significant difference between children of rich and poor home environments on all the dimensions of creativity.

To the best of the researcher's knowledge little or no studies have been conducted on psychosocial precipitators of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State. And this is posing an impediment to the purposeful nurturance of such precipitators at the detriment of the creativity of the learners. It is against this background that the researcher embarked upon the study.

Statement of the Problem

Primary school pupils in Rivers West Senatorial District need to be creative in order to adjust to the school environment, solve basic school problems, invent new things and compete favourably with their counterparts in other parts of the world. Parents, teachers, counsellors and significant others therefore strive to help boost creativity among primary school pupils in the area.

The researcher noticed that the primary school pupils in Rivers West Senatorial District tend to differ along the lines of gender in their manifestations of creativity. And the researcher is suprised that inspite of the concerted efforts of well-meaning individuals and institutions in Rivers West senatorial district geared towards boosting creativity in the area, only few pupils tend to manifest creativity as the rest have remained conventional or culturally congruent and this is problematic in that it debilitates or militates against innovation, individuality and advancement in science and technology in future.

It appears that there are certain psychosocial variables that precipitate creativity among the few pupils that manifest creativity bubbles in the district unknown to the general public. It became imperative to investigate such variables as to consolidate creativity among the entire pupils. The problem of the study therefore was to investigate psycho-social precipitators of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State.

Research Questions

The study was guided by the following research questions:

1. What is the mean rating of motivation as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?
2. What is the mean rating of mastery of experience as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?
3. What is the mean rating of school environment as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?

4. What is the mean rating of social expectations as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?

Hypotheses

The study was guided by the following null hypotheses:

H01: There is no significant difference in the mean rating of motivation as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

H02: There is no significant difference in the mean rating of mastery of experience as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

H03: There is no significant difference in the mean rating of school environment as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

H04: There is no significant difference in the mean rating of social expectations as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

Methodology

The study adopted a descriptive survey research design. Four research questions and four hypotheses were formulated to guide the study. The population of the study comprised the entire public primary school pupils in Rivers West Senatorial District numbering 16,127. A sample of 420 pupils encompassing 279 females and 141 males was drawn from the population using stratified random sampling technique. The instrument for data collection was a researcher developed likert scale titled: Psychosocial Precipitators of Creativity Scale (PPCS). The instrument was validated by two experts in Educational Psychology, Guidance and Counselling Department of Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt. The reliability of the instrument was determined through the test re-test method using Pearson's product moment correlation which yielded a reliability coefficient of .84. The researcher administered 420 copies of the instruments to the respondents with the aid of two research assistants; of all the administered copies of the instrument only 400 copies were properly filled and retrieved. The research questions were answered using mean and standard deviation while the null hypotheses were tested using independent t-test.

Results and Findings

Research Question One: What is the mean rating of motivation as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?

Table 1: Mean Rating of Motivation as a Precipitator of Creativity among Public Primary School Pupils Based on Gender

S/ N	Items	Male n=141	Female n=279
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		\bar{x}	S.D	Result	\bar{x}	S.D	Result	Mean Set
1.	I want to win cash prices in school hence my creativity	2.10	1.10	D	3.71	1.21	SA	2.9
2.	I desire to win an award as an exceptional pupil hence my inventiveness	3.51	0.11	SA	2.01	1.02	D	2.8
3.	I want to become an engineer that's why I always try to develop my own toys	3.02	0.23	A	3.91	1.11	SA	3.5
4.	I want to become a fashion designer that is why I always try to innovate new styles	2.11	0.31	D	3.62	1.21	SA	2.9
	Grand Mean	2.69	0.44	A	3.31	1.14	A	3

Table 1 above shows the mean rating of motivation as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the male pupils had a grand mean of 2.69 while the female pupils had a grand mean of 3.31. This shows that motivation precipitated creativity among the female pupils than the male pupils.

Research Question Two: What is the mean rating of mastery of experience as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?

Table 2: Mean Rating of Mastery of Experience as a Precipitator of Creativity Based on Gender

S/ N	Items	Male n=141			Female n=279			Mean set
		\bar{x}	S.D	Result	\bar{x}	S.D	Result	
1.	I have increased confidence and this makes me try new things	3.62	0.23	SA	3.91	1.02	SA	3.8
2.	I have developed greater sense of control and this is fostering my innovation	3.51	0.71	SA	3.31	1.11	A	3.4
3.	I trust my ability to solve problems that's why I try to be inventive	3.63	0.25	SA	3.92	1.04	SA	3.8

4.	I adapt to new situations easily hence my quick improvisation	3.32	0.11	A	3.34	1.11	A	3.3
5.	Grand Mean	3.52	0.33	SA	3.62	1.07	SA	3.6

Table 2 above shows the mean rating of mastery of experience as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the male pupils had a grand mean of 3.52 while the female pupils had a grand mean of 3.62. This shows that mastery of experience precipitated creativity among the female pupils than the male pupils.

Research Question Three: What is the mean rating of school environment as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?

Table 3: Mean Rating of School Environment as a Precipitator of Creativity Based on Gender

S/ N	Items	Male			Female			Mean Set
		\bar{x}	S.D	Result	\bar{x}	S.D	Result	
1.	My school environment is well decorated and this inspires me to be inventive	3.52	1.11	SA	2.21	1.11	D	2.9
2.	Have lots of nice buildings in my school and this triggers my artistry	2.91	1.21	A	2.11	1.24	D	2.51
3.	Have a conducive learning environment in my school and this fosters my self-expression	3.24	1.21	A	2.40	1.25	D	2.82
4.	Have functional sports facilities that gives me inspiration	3.31	1.12	A	2.51	1.20	A	2.91
Grand Mean		3.25	1.16	A	2.31	1.2	D	2.8

Table 3 above shows the mean rating of school environment as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the male pupils had a grand mean of 3.25 while the female pupils had a grand mean of 2.31. This

shows that school environment precipitated creativity among the male pupils than the female pupils.

Research Question Four: What is the mean rating of social expectations as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender?

Table 4: Mean Rating of Social expectations as a Precipitator of Creativity Based on Gender

S/ N	Items	Male			Female			Mean set
		\bar{x}	S.D	Result	\bar{x}	S.D	Result	
1.	Open mindedness makes me original in my conducts	3.62	0.23	SA	3.91	1.02	SA	3.8
2.	My people's custom ignites my ingenuity	3.51	0.71	SA	3.31	1.11	A	3.41
3.	The need to communicate appropriately makes me innovative	3.63	0.25	SA	3.92	1.04	SA	3.8
4.	Active listening fuels my imagination	3.32	0.11	A	3.34	1.11	A	3.3
5.	Grand Mean	3.52	0.33	SA	3.62	1.07	SA	3.6

Table 4 above shows the mean rating of social expectations as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the male pupils had a grand mean of 3.52 while the female pupils had a grand mean of 3.62. This shows that social expectations precipitated creativity among the female pupils than the male pupils.

H01: There is no significant difference in the mean rating of motivation as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

Table 5 Independent t-test Analysis of Motivation as a Precipitator of Creativity Based on Gender

Gender	n	Mean	Std. Deviation	t	df	sig	Decision
Male	189	2.69	0.44				Significant

				7.294	398	.005	
Female	211	3.31	1.14				

Table 5 above shows independent t-test analysis of motivation as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the calculated t-value of 7.294 has a p-value of .005 which is below 0.05 level of significance. Thus, the null hypothesis is rejected.

H02: There is no significant difference in the mean rating of mastery of experience as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

Table 6 Independent t-test Analysis of Mastery of Experience as Precipitator of Creativity Based on Gender

Gender	n	Mean	Std. Deviation	t	df	sig	Decision
Male	189	3.52	0.33	1.269	398	.063	Not Significant
Female	211	3.62	1.07				

Table 6 above shows independent t-test analysis of mastery of experience as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the calculated t-value of 1.269 has a p-value of .063 which is above 0.05 level of significance. Thus, the null hypothesis is retained.

H03: There is no significant difference in the mean rating of school environment as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

Table 7 Independent t-test Analysis of School Environment as a Precipitator of Creativity Based on Gender

Gender	N	Mean	Std. Deviation	t	df	sig	Decision
Male	189	3.25	1.16	7.96	398	.001	Significant
Female	211	2.31	1.2				

Table 7 above shows independent t-test analysis of school environment as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the calculated t-value of 7.96 has a p-value of .001 which is below 0.05 level of significance. Thus, the null hypothesis is rejected.

H04: There is no significant difference in the mean rating of social expectations as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender.

Table 8 Independent t-test Analysis of Social Expectations as Motivation to Learning as a Precipitator of Creativity Based on Gender

Gender	n	Mean	Std. Deviation	t	df	sig	Decision
Male	189	3.52	0.33	1.269	398	.063	Non Significant
Female	211	3.62	1.07				

Table 8 above shows independent t-test analysis of social expectations as a precipitator of creativity among public primary school pupils in Rivers West Senatorial District of Rivers State based on gender. An overview of the table revealed that the calculated t-value of 1.269 has a p-value of .063 which is above 0.05 level of significance. Thus, the null hypothesis is retained.

Discussion of Findings

The result of research question one and hypothesis one (Table 1 and Table 5) revealed that motivation significantly precipitated creativity among the female pupils than the male pupils. It appears that cultural incongruence is one of the driving forces of creativity among the female students given that the prevalent socio cultural norms tend to constraint females to homekeeping. The creativity efforts of the female students therefore could be likened to an attempt to challenge the status quo for posterity sake. The result gives credence to the findings of Kadyirov et al. (2024) which revealed that intrinsic motivation had a positive significant impact on students' creative performance of divergent thinking, originality of ideas, persistent attitude, and intellectual risk-taking.

The results of research question two and hypothesis two (Table 2 and Table 6) revealed that mastery of experience slightly precipitated creativity among the female pupils than the male pupils. The result suggest that the female pupils devote more of their time and effort to hone their skills in other to master their learning experiences for improved productivity. This could be due to past conditioning or socialization. The result gives credence to the findings of Yeh et al. (2019) which revealed that participants with higher scores on the concerned variables improved more in both creative ability and confidence. Additionally, path model analysis revealed that mindful learning experience was a powerful predictor of both mastery experience and flow experience; it also influenced mastery experience through flow experience and self-efficacy.

The results of research question three and hypothesis three (Table 3 and Table 7) revealed that school environment significantly precipitated creativity among the male pupils than the female pupils. It appears that the school environment and it's underlying culture are designed in content and function to favour the male students the more and this gives the male students an edge over their female colleagues in Rivers West Senatorial District. This result disagrees with the findings of Sharma

(2016) which revealed that government school students of Chandigarh city have higher creativity except in elaboration as compared to private school students and that girls as compared to boys have higher level of creativity.

The results of research question four and hypothesis four (Table 4 and Table 8) revealed that social expectations precipitated creativity among the female pupils than the male pupils. It seems that the society expects more of productivity from female pupils than male pupils given the pride of place that they occupy in our society when it comes to home building. The drive to be creative among the female pupils can therefore be said to stem from lifelong social expectations of femininity and by extension motherhood. This confirms the findings of Stoltzfus et al. (2011) pertaining to the moderating impact of gender on creativity.

Conclusion

Based on the findings of the study, the researcher concluded as follows.

The psychosocial precipitators of creativity among public primary school pupils in Rivers West Senatorial District include; motivation, mastery of experience, school environment and social expectations. The students tend to be creative when they have cogent intrinsic and extrinsic motives to do so. Concomitantly, mastery of experience is integral to individuality and creativity given that the learners now characterize their learning experiences by a value complex. The school environment provides an enabling environment for creativity to thrive while social expectations influence the direction and dimension of such creativity. Gender is integral to the extent to which motivation, mastery of experience, school environment and social expectations precipitates creativity.

Recommendations

The researcher recommends that;

1. Male and female pupils alike should be motivated by parents, teachers and significant others using cash prizes, toy gifts and scholarships to boost creativity among them.
2. Male and female pupils should be encouraged by teachers and significant others to do things on their own, adapt and originate new ideas to boost their creativity.
3. School environments in Rivers West Senatorial District should be made more scintillating and stimulating to foster creativity among pupils in the District.
4. Parents should create necessary social contingencies that will make pupils know and understand that they are expected to be creative.

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