Prosocial Behaviour Towards Victims of Road Accidents: Examining Personality, Gender and Traumatic Experience

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ABSTRACT---- *As Ebonyi State develops into a city with the attendant population growth and increasing motor traffic, the category of residents that can form part of the road safety network should be of great concern. The study investigated the strengths of personality, gender and traumatic experience as predictors of prosocial behaviour among motorists in Abakaliki, Ebonyi State. One hundred and ninety-nine (199) road users in Abakaliki, Ebonyi State, participated in the study. Participants were randomly drawn using a convenient sampling technique in a cross-sectional survey design. The Big-Five Personality Inventory, the Trauma History Questionnaire (THQ), and the Self-Report Altruism Scale were used for data collection. Data analysis using the multiple regression analysis revealed that some dimensions of personality (extraversion, agreeableness, conscientiousness, and openness to experience) were positively related to prosocial behaviour; gender was not significantly associated with prosocial behaviour and traumatic stress experience especially and positively predicted prosocial behaviour. The study observed that personality trait is the most significant predictor of prosocial behaviour toward road accident victims. Based on the theory of empathic altruism, we recommend aggressive and widespread education on road safety measures for all ages and establishing a civilian road safety network to complement the efforts of FRSC in Ebonyi State.*

Keywords--- Prosocial behaviour; Road Safety; Road Traffic behaviour; Traumatic experience; Personality; Gender

1. INTRODUCTION

Road accidents have become a regular and re-occurring phenomenon in Nigeria, constituting a menace in modern times, particularly in Ebonyi State [1, 2]. Reviewing the yearly reports of road accidents in Nigeria from 2007-2017, we find that disobedience of traffic laws, loss of control, and reckless driving are the most common causes of road accidents there [3]. Previous studies have revealed that Nigerians know quite a bit about what might cause road traffic accidents, showing that the Federal Road Safety Corps (FRSC) is doing an excellent job of educating the public about how to keep themselves and others safe on the roads [4, 3]. However, irrespective of this awareness, prevention of deaths on the roads (obeying the rules and attending to emergencies) may be linked more to the willingness to engage in prosocial behaviour anchored on personality [5,6,7].

Prosocial behaviours refer to actions intended to help or benefit another individual or group [8]. These behaviours include various activities such as sharing, comforting, rescuing and helping [8]. Certain personality traits with direct outward attention towards others, in which individuals pay attention to others' needs and recognize opportunities to help others, have been studied [9, 10]. In a social dilemma, when individuals must decide whether to benefit the common good or the self, compassion may facilitate prosociality, and pride may stand in cooperation [11]. Prosocial teen behaviour is correlated with agreeable and conscientious traits in the present and the future [12]. [13, 14] found that prosocial behaviour overlaps considerably with the constructs of agreeableness and conscientiousness. Prosocial tendencies give rise to a responsible and helpful demeanour, which characterizes agreeableness; prosocial behaviour requires self-regulation and self-control, which define conscientiousness [12].

Gender has been linked with prosocial behaviour [15]. Based on gender roles, females generally are expected and believed to be more responsive, empathetic and prosocial than males, whereas males are expected to be relatively independent and achievement-oriented [8]. [16] examined gender differences in violent versus non-violent life-threatening altruism using 216 undergraduate students (108 males and 108 females) from Central Michigan University – a Midwestern American University with an on-campus student population of about 20,000. The study consisted of a 3(genetic relatedness

between participants and recipient) x 2(types of altruism: violent vs non-violent) x2(sex of participants) mixed design. Genetic relatedness, sex of the participant, and sex of the target were between-subject variables, whereas the type of altruism was a within-subject variable. The dependent variable was the estimated likelihood of performing the altruistic act. The results revealed a significant main effect of genetic relatedness. A Turkey posthoc analysis found that people considering their siblings had a higher estimated likelihood of helping than people considering cousins and friends. A significant main effect for type of altruism was also found, indicating that people had a higher estimated chance of helping those in violent altruistic situations than non-violent ones. This kind of altruism also interacted with the sex of the participant. Follow-up analysis of this interaction revealed that women were more willing than men to aid people in non-violent situations. However, recent research on prosocial behaviour did not support the significantly higher altruism ratings from female participants in non-violent cases [17, 18]. Even in older studies, a gender difference is not found when a non-violent altruism example is used [19, 20, 21].

[22] linked empathic altruism to life-threatening experiences when he found that some individuals who have suffered from violence restore meaning and turn toward others, becoming caring and helpful, a phenomenon that has been termed "altruism born of suffering" [22]. The theory of empathic altruism is based on an individual's willingness to improve the welfare of the person being assisted. People are more likely to help others if they empathize [23, 24] The reciprocation mechanism only takes over if people do not feel empathy. [25] take a similar approach to how emotionality interacts with other dispositional characteristics to influence empathy and prosocial responses in children. The nature of the altruistic personality and the components of a person's personality connect to helping behaviours in various contexts [26, 27, 28]. Personality is not the only factor that influences whether or not individuals help. From a social-psychological perspective, we must evaluate the situational pressures people face and their personalities to understand human behaviour, such as how people behave usefully in certain situations [29].

Several studies have found that certain people are more willing to help in a single situation, whereas others are more likely to help in various cases [23]. For example, [30] conducted a classic study examining ten thousand students' willingness to help in various places and times and whether students could predict how helpful they would be in particular scenarios. The findings revealed that morality, as a trait, was the most significant predictor of prosociality. Helping behaviour, on the other hand, was influenced by the composition of mates' groups, in-group and outgroup dynamics, closeness, and socioeconomic background. These findings suggest that personality and situational and temporal aspects should be considered when analyzing how helpful behaviours are shown. Though traumatic experiences have been implicated in helping behaviour [31, 32], no study has examined the roles of personality, gender and traumatic experience on prosocial behaviour towards victims of road accidents in Nigeria. In addition, this study aims to highlight the need to create a civilian safety network that will complement the effort of the FRSC. With the contention that the inclusion criteria of this civilian safety network will be based on psychophysical dispositions, we hypothesized that:

1. Personality will predict prosocial behaviour towards victims of road accidents.

2. Gender will predict prosocial behaviour towards victims of road accidents.

3. Traumatic experience will predict prosocial behaviour toward victims of road accidents.

2. METHOD

Participants

One hundred and ninety-nine (199) motorists in Abakaliki, Ebonyi State, participated in the study. Participants comprised males (n = 100) and females (n =99). Participants were drawn using a convenient sampling technique. The inclusion criteria in this study were being a motorist residing in Abakaliki who could read, write and understand the English Language.

Instruments

Personality was measured using the Big-Five Personality Inventory designed by [33], a 44-item inventory that measures an individual on the Big Five personality factors. Next, the traumatic experience was measured using the Trauma History Questionnaire (THQ) designed by [34], consisting of 24 yes/no questions designed to gather information via self-report from general, community, and clinical populations about lifetime exposure to a range of potentially traumatic events. Finally, prosocial behaviour was measured using the Self-Report Altruism Scale developed by [35], a 20-item that measures intentions related to altruistic behaviours. The current researchers modified the language of this scale to reflect the willingness to help a road accident victim with a test-retest reliability coefficient of 0.76.

Procedure

The questionnaires were distributed to 210 motorists in the Abakaliki metropolis in Ebonyi State. The study instruments were completed by the participants who met the inclusion criteria and consented to participate. The study questionnaires

were collected immediately upon completion. Eleven incomplete or incorrectly filled questionnaires, down to 199 valid measures.

Design and statistics

The study is a cross-sectional survey design. Three independent variables (personality, gender and traumatic experience) were studied. A Multiple Regression Analysis was employed for the data analysis.

3. RESULT

Table 1: Means, standard deviations and inter-correlations of prosocial behaviour, gender, age, extraversion, agreeableness, conscientiousness, neuroticism, openness to experience and traumatic experience.

Variables	M	SD	1	2	3	4	5	6	7	8	9
1 PB	52.30	12.10	1.00	-	-	-	-	-	-	-	-
2 Gender	1.50	0.50	-.09	1.00	-	-	-	-	-	-	-
3 Age	29.48	4.19	-.01	.03	1.00	-	-	-	-	-	-
4 Ext.	25.78	5.39	.28**	-.12*	-.04	1.00	-	-	-	-	-
5 Agree.	30.78	5.24	.28**	.00	.02	.02	1.00	-	-	-	-
6 Consci.	30.47	5.52	.23**	-.04	-.03	.03	.34**	1.00	-	-	-
7 Neuroticism	21.66	4.03	-.10	.04	-.13	-.19*	-.39**	-.12*	1.00	-	-
8 Openness	32.65	4.92	.27**	-.11	-.07	.20*	.15*	.39**	.05	1.00	-
9 Trauma	11.93	8.54	.25**	.01	.02	.16*	.07	.19*	-.04	.07	1.00

Note: * = $p<.05$; ** = $p<.001$; *JI-Prosocial Behavior; Ext.-Extraversion; Agree.-Agreeableness; Consci.-Conscientiousness; Openness- Openness to Experience; and Trauma-Traumatic Experience.*

The correlation showed that age, which served as a control variable in this study, was not significantly related to prosocial behaviour ($p<.05$, $r= -.01$). Some dimensions of personality (extraversion, agreeableness, conscientiousness, and openness to experience) were positively related to prosocial behaviour ($p<.05$, $r= .28$), ($p<.05$, $r= .28$), ($p<.05$, $r= .23$) and ($p<.05$, $r= .27$). This result supports hypothesis one. Specifically, Extraversion and agreeableness had a more positive relationship with prosocial behaviour than openness to experience, followed by conscientiousness. The neuroticism dimension of personality had no significant relationship with prosocial behaviour ($p<.05$, $r= -.10$). gender was not significantly related to prosocial behaviour ($p<.05$, $r= -.09$). Thus, hypothesis two is not supported. In this study, traumatic experience positively correlated with prosocial behaviour ($p<.05$, $r= .25$); thus, hypothesis three is supported.

Table 2: Hierarchical multiple regression predicting prosocial behaviour by personality dimensions and traumatic experience

Predictors	B	SESE.	B	T	R^2 Change
Step 1					.01
Gender	-2.16	1.72	-.09	-1.26	
Age	-.01	.21	.00	-.06	
Step 2					.19
Extraversion	.56	.15	.25*	3.66	
Agreeableness	.56	.17	.24*	3.22	
Conscientiousness	.20	.16	.09	1.23	
Neuroticism	.22	.22	.05	.69	
Openness to Experience	.18	.18	.14	1.86	
Step 3					.04
Traumatic Experience	.28	.09	.19*	2.98	

Note: $^*p < .01$; Total $R^2 = .24$.

The control variable (age) did not significantly predict prosocial behaviour, though age and gender accounted for 1% of the variance in prosocial behaviour. Personality traits accounted for 19% of the variance in prosocial behaviour and were stronger predictors of prosocial behaviour than gender and traumatic experience. Traumatic experience significantly and positively predicted prosocial behaviour. Traumatic experience explained 4% of the variance in prosocial behaviour.

4. SUMMARY OF FINDING

1. Extraversion and agreeableness had a more vital link with positive prosocial behaviour than openness to experience, followed by conscientiousness, while the neuroticism personality trait had no significant relationship.

2. Gender was not significantly related to prosocial behaviour.
3. Traumatic experience significantly and positively predicted prosocial behaviour.

5. DISCUSSION

Some dimensions of personality (extraversion, agreeableness, conscientiousness, and openness to experience) were positively related to prosocial behaviour. Extraversion and agreeableness had a more vital link with positive prosocial behaviour than openness to experience, followed by conscientiousness, while the neuroticism personality trait had no significant relationship. Extraversion and agreeableness dimensions of personality significantly and positively predicted prosocial behaviour, while the other dimensions of personality did not predict prosocial behaviour. This aligns with the result of [35] who found that all personality traits except neuroticism significantly predicted prosocial behaviour. This study also runs alongside the result obtained by [5], who found that only extraversion and conscientiousness had a significant relationship with prosocial behaviour. The current research shows that personality is the strongest predictor of prosocial behaviour and, therefore, significant in road safety. Specifically, more outgoing and friendly individuals tend to help victims of road mishaps. Irrespective of the intention behind this tendency, this result supports the altruistic personality theory.

Gender was not significantly related to prosocial behaviour. An explanation for this could be that both genders contribute prosocially in unique ways. Women are usually more emotional beings than men and hence might provide a different kind of support to victims of road accidents which may not necessarily be physical. In an accident scene, a woman might behave prosocially by calling for medical help, supporting an injured person physically while awaiting help, reassuring the victim of their safety and various other forms of emotional or psychological assistance based on social distance [18]. On the other hand, men often show signs of care or prosociality physically. For example, in a scene of an accident, a man might show prosocial behaviour by heaving the victim on his shoulders while racing toward the nearest medical centre or attempting to lift a heavy object off a trapped victim [15]. The non-significant role of gender in the current result might have accounted for the reduced evolutionary pressure on men as the only gender that provides for society. Thus, both gender now understands their social roles as complementary, cooperative, and interchangeable.

Traumatic experience significantly and positively predicted prosocial behaviour. Participants with lower traumatic experience had higher prosocial behaviour than those with a higher traumatic experience. This is in contrast with the result obtained by [32], which found that tremendous suffering was associated with helping more victims (a deterrent observation), even when controlling for relevant variables such as network size, life events, race, sex, age, marital status, and education. This also does not tally with the result of [31], which showed that individuals who reported experiencing more traumatic events in their lifetime reported engaging in more helping behaviours. The current result supports the empathic theory of altruism. Thus, people understand a situation better after they have gone through it. Survivors understand the pain of road accidents more, which could have been the mediating variable.

6. IMPLICATIONS OF THE STUDY

This study captures the relevance of psychological variables in social progress, particularly in saving human lives in road traffic emergencies such as traffic accidents. Thus, factors inherent in individual bystanders reecho. Knowledge of proper road use and the consequences of disobeying traffic rules should be emphasized. An empathic understanding of road traffic accidents should be taught to residents and road users through Road Safety seminars and workshops across all local government areas in Ebonyi State. Moreover, road safety should also be added to the state's educational curriculum in Primary, Secondary and Tertiary Institutions. There is a need for enlightenment on the vitality of timely intervention for road accident victims, as negligence could lead to death. There is a strong need for male and female drivers to maintain good levels of enlightenment and alertness toward helping victims of road accidents. Stringent rules relating to road misuses, such as light traffic disobedience and reckless driving, should be made to improve driving behaviour.

7. LIMITATIONS OF THE STUDY

The study has some limitations. First, the sample size must be more significant to generalize beyond Abakaliki Metropolis. Sample selection was affected by the low willingness of road users to respond to the questionnaires. Thus, future studies on this topic should have a larger sample. The study is a cross-sectional study using Multiple Regression. This may have limited the exploratory and explanatory powers of the result. Thus, future studies should focus on longitudinal design examining mediation effects of such variables as personality and traumatic experiences.

8. SUMMARY AND CONCLUSION

This study investigated personality, gender and traumatic experience as predictors of prosocial behaviour towards victims of road accidents. The result of the study revealed a significant favourable influence of personality on prosocial behaviour towards victims of road accidents. The result of this study point to the need to develop opportunities for self-development that will enhance empathic relations with road users, especially with victims of road accidents. Moreover, we can achieve this through heightened education on on-road use and the need, road safety-focused training on the help technique, and

establishing a civilian road safety network that will complement the Federal Road Safety Corps (FRSC). Therefore, all hands must be on deck to improve helping behaviour towards road accident victims.

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