

Counterfactual Thinking and Gender Difference Effect on Voting Decision

Larry Okechukwu Awo^{1*}, Christopher Agha Oko¹, Abubakar Yahaya¹, Perpetua Chinyere Chukwu¹

¹Citizenship Education Unit, School of General Studies, Federal Polytechnic of Oil and Gas, Bonny Island, Nigeria

*Corresponding Author

Abstract: - General elections globally have been characterized by large or low turnout of voters. Numerous reasons has been suggested as plausible explanations of voting decision during elections. We adopted a 2x2 factorial design to test the effects of counterfactual thinking and gender differences in the voting decision of Nigerian voters during the 2019 general election. One hundred and twenty (60 male, 60 female) National Diploma 1 students of a Federal Polytechnic (age range = 19-27, mean age = 22.37, SD =2.85) participated in the study. Counterfactual thinking was varied into downward and upward counterfactual conditions, while gender was categorized into male and female electorates. The counterfactual voting thought, and the reasons to vote questionnaire were the stimulus materials used to assess counterfactual thinking and voting decision respectively. Analysis of variance (ANOVA) result revealed significant main effects for counterfactuals and gender on voting decision. The interaction of counterfactual thinking and gender had nosignificant effect on voting decision, ($p>.05$). The implications and limitations of these findings were discussed and suggestions were made for future studies

election duty, non-availability of good leadership, poor integrity of candidate, and long distance to the polling station from the house. It is believed that voting decision is generally a function of psycho-political factors such as ethnicity, religion, education, perceived relevance of political actors, royalty of family, party manifesto, party loyalty, kinship, feelings of the outcome of previous elections and the voter's level of willingness to avoid electoral risk (Haider, 2014; Shawar & Asim, 2012). Prominent among the psychological factors suspected to influence decisions to vote during general elections are the thought of "what if.....", "if only.....", (counterfactual thinking) that characterize post-election evaluations of one's actions and roles in an election, and the gender of the voter. We aim to explore how these constructs (counterfactual thinking and gender) has contributed to the explanation of voting decision during general elections in Nigeria.

Counterfactual thinking and voting decision

I. INTRODUCTION

Democracy enables citizens and electorates the opportunity to choose leaders that reflect their aggregate will and choice through voting. Voting is an expression of an individual choice for apolitical candidate, and/or specific political structure (Balis, Gidengil & Nevitte, 2004). According to the Universal Declaration of Human Right, "voting is a fundamental right of almost all citizens over the age of eighteen, and it ensures that the will of the people is preserved" (Human Right Commission of Pakistan, HRCP, 2008, p.144). Going by this declaration, Nigerians of age 18 years or above, have the right to vote after getting registered through the Independent National Electoral omission (INEC) whenever national or state elections are held (usually every 4 years). Muhammad and Hasan (2016), and Muhammad (2013) enumerated the psychological factors that determine votes during elections to include political party of candidate, party integrity, party leadership, party manifesto and party previous performance, candidate's integrity, candidate's election campaign, candidate's previous performance, candidate's education, candidate personality, candidate's race, candidate's socioeconomic status, family head decision and good governance.

Other reasons to cast the vote included national duty, basic rights, wanting change, source of opinion and betterment of country while the reasons not to vote included

Individuals are commonly beset by thoughts of what would, might, or could have been if events had taken a different turn. When people reflect on past events, they tend to think not only about the events that actually happened but also about how those events might have happened differently (Schacter, Bennoit & Szpunar, 2015; Walsh & Byrne, 2004). For example, if one's car breaks down and he/she is late to work or an engagement, he/she might think that this lateness would have been avoided "if only" he/she had had the car serviced the day/week before or if he/she had taken the public transport option. Such pattern of thought often termed Counterfactual Thinking (CFT) is capable of affecting an individual's future decisions (Kahneman & Tversky, 1982; Petrocelli & Harris, 2011; Tversky & Miller, 1986).

CFT refers to the process of reflecting on past events and simulating alternative possible outcomes. As a thought about what might have been, it involves the mental comparison of an actual situation with a simulated alternative. This pattern of thought has been shown to play crucial roles in many/key decision-making processes, such as helping help people learn from past mistakes and to develop intentions for future decisions and actions (Sanna, Schwarz, & Stocker, 2002). This thought has also been shown to impact on a range of emotions and social judgments, including regret, guilt and self-blame (Epstude & Roese, 2008). Counterfactuals

enhance learning from and improvements on past mistakes (Smallman & Roese, 2009), create meaning in life (Kray, George, Liljenquist, Galinsky, Tetlock, & Roese, 2010), and are crucial to reasoning, judgment, and decision-making (Evans, 2007).

Counterfactuals is classified into two major forms (Khaneman & Tversky, 1982), which include; 1) thought about possible better alternatives, and 2) thought about possible worse alternatives. Counterfactuals of possible better alternative is termed upward counterfactuals, and it usually induces negative feelings and emotions, whereas counterfactuals of possible worse alternatives is termed downward counterfactuals and generally induce positive feeling and emotions (Markman, Gavanski, Sherman, and McMullen, 1993). For example, studies (Kim, Kwom, & Hyun, 2015; Celuch, Saxby & Oedin, 2015; Monforton, Vickers & Antony, 2012; Sirois, Monforton & Simpson, 2010) demonstrate that upward counterfactuals are positively associated with negative feelings of anger and regret, while downward counterfactuals are positively associated with feelings of satisfaction and elation.

The influence of counterfactuals on voting decision remains largely un-investigated most especially in Nigeria. Previous studies provide evidence that counterfactual thinking may be the cognitive mechanism underlying the generation of regret and elation at different times and domains (Tsiros & Mittal 2000). However, the present research aims to predict general elections voting decision of Nigerians as a result of the post 2015 general election economic recession using upward and downward counterfactual thinking indices and patterns.

Gender and voting decision

The different voting behaviour of men and women has not been as pronounced as, for instance, between workers and members of the upper-middle class (Abendscho & Steinmetz, 2014). However, gender has always been a variable of interest in studies of political behaviour since the beginning of political culture research (see Almond & Verba, 1963 cited in Abendscho & Steinmetz, 2014), and has become a relevant factor in the analysis of voting pattern across world democracies (Knutsen, 2001). This history of gender voting differences dates back to the Western democracies, and is divided into three phases- a) traditional gender gap, b) female party de-alignment, and c) de-alignment phase (Inglehart & Norris, 2003). The traditional gender gap, which dominated the 1970s/early 1980s, is characterized by a more conservative vote from women in comparison to men (Manow & Emmenegger, 2012). The predominant explanation for this was women's pronounced religiosity and less involvement in the labour market (Baxter & Lansing, 1983). The traditional family structures, and a woman's devotion to her family, worked in favor of a more conservative female vote (Studlar, McAllister & Hayes, 1998).

In the 1980s, the gender differences in voting pattern substantially diminished in several countries such as Canada,

the United States, and the Netherlands (Abendscho & Steinmetz, 2014). This phase known as female party de-alignment has partly been explained by the modernization and secularization processes (Inglehart & Norris, 2000). Shortly thereafter, in the 1980s, surprisingly new gender-driven voting differences emerged in some advanced democracies, such as the United States, West Germany, and the Netherlands. Thereafter, a third phase known as de-alignment phase defined by a modern gender voting gap came into the political scene. However, these new emerging electoral gender differences are rather seen as a reflection of overall societal value changes. Giger (2009) confirmed that gender gap can still be observed in the majority of Western European countries in the 21st century. According to Abendscho and Steinmetz (2014), "since 2000, there has been no cross-national evidence regarding the situation of the modern gender voting gap, or support for Inglehart's and Norris 'realignment theory'".

Besides the predominant socio-structural and situational explanations, cultural, religious and attitudinal explanations focusing on the political attitudes and value orientations of women might also partly explain the gender disparity in voting decision (Manow & Emmenegger, 2012). The empirical findings concerning the explanatory power of the above described factors are divergent. Whereas Inglehart and Norris (2000) show that both structural and cultural aspects can account for some, if not most, of the variance of the modern gender voting gap, Iversen and Rosenbluth (2006) find that gender differences already vanish when structural characteristics are integrated into the model. These inconsistencies might stem from the selection and grouping of countries in the respective studies. This is in line with findings from cross-national analyses (e.g., Bergh 2007) indicating that explanatory factors differ depending on the national context. Knutsen (2001), for instance, has shown that even structurally and culturally similar Scandinavian countries (Norway, Sweden, and Denmark) differ to some extent with regard to the modern gender voting gap. These findings already point towards the relevance of the national context, and give rise to the question what contextual factors account for these differences.

The present study

Although, several experiments address political phenomena other than voter participation (Butler & Broockman 2015; Grose, 2014), only a few studies have attempted to investigate the role of counterfactual thoughts in political actions and behaviour such as voting decision during general and specific elections (Gerber & Green, 2016). As Kray, George, Berkeley, Gallinsky, Tetlock, and Roese (2010) wrote, upward voting counterfactuals (when compared with downward voting counterfactuals) generates negative feelings and regret over one's voting decision in general elections. This feeling may trigger decisions not to partake in future elections, or influence a voter's decision to vote for/or against his/her choice candidates or party which he/she voted

for in the past election. Empirical evidences on the effects of counterfactual thinking and voting decision in Nigeria is lacking. We aim to fill this gap in knowledge by examining the voting decision of the Nigerian electorate based on their thought and cognitive simulation of the outcome of the 2015 general election as they weigh the post-election economic situation in the country and how their choice to vote or not for a particular candidate in the election contributed to the post-2015 general election economic recession. It is our prediction that counterfactual voting thought would determine the voting decision of the electorates.

Also, in line with Kai-Yu, Minli and Laura (2010), we predict that downward counterfactual thinking will result in positive mood and approval of one's voting choices in the past general election and also trigger intentions to continue voting for the candidate or party that is perceived have no positive influence on the post-2015 election recession in Nigeria.

A recent study, (Muhammad, 2013) reported no significant gender differences in voting decision, even though, both men and women took similar interest in their voting decision, suggesting that female voters were influenced by male voters. However a significant difference in decision of voters in rural and urban areas was observed, which indicate that different factors were involved in voting decision across gender and context. Thus, it suggests that vote decisions are starkly different in cities and villages but not so with gender. Therefore, our second aim in this paper is to provide empirical evidence on the gender vote gap a description of the current situation of gender differences in voting across Nigeria. Basically, to understand the voting trend across gender since the return to democratic rule in 2 decade ago, and many women have been elected into political positions at local, state and national levels.

II. METHOD

Participant

One hundred and twenty (60 male, 60 female) National Diploma students drawn from 3 departments (Petroleum Marketing, 40 students, 24 males and 18 females; Industrial Safety, 40 students, 20 male, 20 female; and Computer Science, 40 students, 20 male, 20 female) of the Federal Polytechnic of Oil and Gas (FPOG), Bonny Island, Nigeria were involved in the study. They were randomly selected and assigned to 2 groups (the downward vs upward counterfactual thinking groups). Their ages ranged from 19-27 years ($M = 22.37$ years, $SD = 2.85$ years). Eligibility to vote (being 18 years and above) and voting experience (voted in the 2015 general election) were the major inclusive criteria for the study. They completed the study as part of activities for the completion of the Course Citizenship Education II. The entire classes were awarded extra credit for their participation in the study. The study was conducted in November 2018.

Instruments

Counterfactual voting thought

The economic recession counterfactual thinking inventory developed by the researchers was used to manipulate counterfactual voting thought. The participants read about the upcoming general elections in Nigeria, and were asked to imagine the economic recession that the country found itself immediately after the 2015 general elections that saw a change in the National government since the return of democratic rule from the PDP party to the APC party, and to reflect on how their vote in the general election could have contributed to the recession. They learned that analysts have predicted that the 2019 electoral outcome would depend on what the citizens perceive as the major causes of the economic meltdown in the country. The stimulus material also explains the different treatments to which the counterfactual groups were exposed to in order to assess the effects of the levels of counterfactual thought on voting decision. Manipulation check on the material reveals that it was a reliable and valid measure of counterfactual voting thought ($\alpha = .82$) and positively correlated with voting decision ($r = .41$, $p < .01$). Gender as a categorical variable was classified into male and female. This is based on the information provided by the respondents regarding their gender as male or female.

Voting decision

Voting decision was assessed with the Muhammad and Hasan's (2016) Reasons to Vote sub-scale of the Decision to Vote Scale DVS. It includes 6 statements such as I decide to vote because; "vote is basic right", "vote is way of opinion", "vote is responsibility", "vote is national duty", "vote bring change", and vote brings real representative. It is rated on a 4-point Likert scale format strongly agree to strongly disagree. The scale reported high reliability among Pakistani sample ($\alpha = .86$) and Nigerians ($\alpha = .82$), and higher score reflects high voting decision while lower scores is indicative of decision not to vote.

III. PROCEDURE

Participants read a description of Nigeria as it prepares to go into the 2019 general polls. Participants were asked to imagine the perceived role of the former ruling party - the "PDP" and the present ruling party - the "APC" in the post-2015 election economic recession in the country as it prepares to cast their votes in the 2019 general election. They learned that analysts predicted that the electoral outcome would depend on the party whose actions and inaction led to the recession. The party whose actions and inaction were perceived as alleviating the effects of the recession was expected to win by a wide margin.

The 120 (60 female, 60 male) that took part in the study were randomly assigned to the two study groups through a simple random selection. Each group was made up of 60 participants (30 girls and 30 boys). Group 1: downward counterfactual thinking, Group 2: upward counterfactual thinking. The

counterfactual thinking was manipulated by varying the information given to the two groups concerning voters' perception of their role in the last general election and how they indirectly created the recession by casting their votes for their preferred candidate/party in the 2015 general election.

The downward counterfactual group (group 1) got the following information:

“After the 2015 general election, Nigeria experienced what experts termed first grade economic recession, believed to be caused by human factors/errors that could have been avoided by both the citizens and the government (present and previous administrations).

QUESTION: As a voter, do you think your voting for your choice candidate in the 2015 general election contributed to the recession and how has it affected your decision to vote or not in the 2019 general election?

ANSWER: The recession would have been worse “...If only... we had voted-in the PDP in the 2015 general election”.

On the other hand, the upward counterfactual group (group 2) received the following information:

“After the 2015 general election, Nigeria experienced what experts termed first grade economic recession, believed to be caused by human factors/errors that could have been avoided by both the citizens and the government (present and previous administrations).

QUESTION: As a voter, do you think your voting for your choice candidate in the 2015 general election contributed to the recession and how has it affected your decision to vote or not in the 2019 general election?

ANSWER: we could have avoided the recession “...If only... we had voted-in the PDP in the 2015 general election”.

After the experiment, participants in all the groups were administered with the voting decision stimulus material to ascertain their decision to vote or not in the 2019 general election. Higher scores (16 and above) indicate very strong decision to vote in the election (vice versa). At the end of the experiment, the participants were fully debriefed on the true purpose of the study. They were awarded extra credit load as reinforcement for being part of the study.

Design/Statistics

A 2(downward CFT vs upward CFT) x 2(male vs female) factorial design was adopted in this study. Simple analysis of variance (ANOVA) was employed to test the study hypotheses.

IV. RESULT

The descriptive statistic table shows that participants in the downward CFT group had higher voting decision mean score (M = 36.77; SD = 6.90) than those in the upward CFT group (M = 20.50, SD = 4.09). Also, the table indicated that male students had a higher voting decision mean score (M = 28.26, SD= 10.33) than female students (M = 23.80, SD = 9.63). This mean score difference was also observed for age. Older students on the average scored higher than their younger colleagues on voting decision (M = 12. 20, SD = 5.23, and M = 11.93, SD = 2.24). These differences were further subjected to ANOVA analysis by way of testing the study hypotheses, the result of which is presented in table 2.

Table 1: Descriptive statistics table showing mean and standard deviation of voting decision scores based on counterfactual thinking, gender and age

Variable	Level	N	Mean	SD
CFT	downward	60	36.77	6.90
	upward	60	20.50	4.09
Gender	male	60	28.26	10.33
	female	60	23.80	9.63
Age	younger	52	11.93	2.24
	older	68	12.20	5.23

Note: CFT = Counterfactual thinking.

The ANOVA table showed that counterfactual thinking had a significant effect on voting decision, $F(1, 116) = 226.83, p = .000$. This means that participants in the downward counterfactual group ranked higher than their counterparts in the upward counterfactual group, in the decision to vote during the general election, and this difference contributed 66% to the explanation of the variance in voting decision. The

table, also, indicated that gender had a significant effect on voting decision, $F(1, 116) = 231.03, p = .000$. This implies that males ranked higher than females in the decision to vote during the general election, and this gender difference accounted for 67% of the explanation of variation in voting decision. No interaction effect was observed for counterfactual thinking and gender ($p > .05$).

Table 2: ANOVA results for effects of counterfactual thinking and academic discipline on voting decision.

SoV	Type III of sum of squares	df	Mean square	F	Sig	Eta2	N
CFT	800.83	1	800.83	226.03	.000***	.66	120
Gender	821.63	1	821.63	231.03	.000***	.67	120
CFT*Gender	30.00	1	2.94	.002	.317	.00	120
Error	411.00	116	3.54				

Note: CFT = counterfactual thinking; ** = $p < .01$; *** = $P < .001$.

V. DISCUSSION

This study examined counterfactual thinking and gender difference effects on voting decision. The study found differences in counterfactual thinking and gender in decision to vote by electorates. Voters who felt that the economy would have been worse “If only” they had voted a different candidate/party in the general election (downward counterfactual) differed from those who felt that the economy would have been in a better state “if only” they had not voted the ruling party/candidate (upward counterfactual) in the general election. This difference significantly affected voting decision among the electorates as it explained about 66% variation in voting decision. This finding provides support to previous research (e.g. Eavers et al, 2015; Terum, 2017; Padron et al, 2016; Ferrante et al, 2013, and Studer, 2017) who had reported that downward counterfactual thinking increases decision and intention in the domain of youth gambling habits. This finding implies that voters in the downward counterfactual condition felt that the recession would have been worse “...If only... they had voted differently in the 2015 general election”, and thus decided to vote more in the 2019 elections (possibly, for the party/candidate they voted for in 2015).

The result also reveal significant gender differences in voting decision as males had strongly decision to vote that females. This difference significantly affected voting decision among the electorates as it explained about 67% variance in voting decision. This finding lends support to previous studies (Muhammad, 2016; Abendschon & Steinmetz, 2014) who observed huge gender gap in voting across global democracies. This finding implies that male are more active during elections and accounts for majority of votes cast during elections. This gender differences could be explained by socio-structural and situational context factors. Based on the argument that women can be found disproportionately more often in precarious employment and/or socio-economic circumstances, they are likely to support and vote for female candidates (Giger 2009; Iversen & Rosenbluth, 2006). Accordingly, since less than 5% of the candidates in Nigerian elections are females, the decision not to vote during the general election could be as a protest by women for more female candidates into elective position, or against non-female friendly policies by the ruling class (in this instance, the male) in Nigeria. The correction of these, could strengthen women’s decision to vote during elections.

VI. LIMITATIONS OF THE STUDY

The limitation of this study is the choice of only 120 Diploma students as the participants even when it is known that they may not be experienced in election matters and decision. This may tend to limit the generalization of the research finding to the student population only who incidentally play less key role in the determination who wins a general or local election in Nigeria.

VII. SUGGESTIONS FOR FURTHER STUDIES

Further studies should involve large population of the electorates cut across different ages and professions. This will in effect show empirical evidence of counterfactual thoughts and gender on voting decision, thereby by enhancing the generalizability of such finding.

VIII. SUMMARY AND CONCLUSION

This study examined counterfactual thought and gender difference effect on voting decision. One hundred and twenty male and female Diploma took part in the study. The participants were randomly selected and assigned into two experimental groups and administered with different treatments. Result of the study indicated that both counterfactual thought and gender differences significantly affected decision to vote. Participants in the downward counterfactuals had stronger decision to vote than those in the upward condition. Voters also differed on their voting decision based on their gender (males had stronger decision to vote than women). These findings were interpreted based on empirical literature. The implications of the study were discussed, the study shortcomings/limitations were stated, and suggestions were made for further studies.

REFERENCES

- [1]. Abendscho, A., & Steinmetz, S. (2014). The gender gap in voting revisited: Women’s party preferences in a European context. *Social Politics*, 21(2), 315-344.
- [2]. Acevedo, M., & Krueger, J. I. (2004). Two egocentric sources of the decision to vote: The voter’s illusion and the belief in personal relevance. *Political Psychology*, Vol. 25, 115-134.
- [3]. Almond, G. A., and Verba, S (1963). *The civic culture: Attitudes and democracy in five nations. An analytical study*. Boston: Little, Brown and Company.
- [4]. Alvarez, R.M. & Nagler, J. (1998). When politics and models collide: Estimating models of multiparty elections. *American Journal of Political Science*, 42, 55-96.
- [5]. Ashley, D. (2003). Factors that Influence voter’s decision during elections: “2015 study.com”. Retrieved: August 17, 2015.

- [6]. Bartels, L.M. (1986). Issue voting under uncertainty: An empirical test. *American Journal of Political Science*, 30, 42-57.
- [7]. Bergh, J. (2007). Explaining the gender gap: A cross-national analysis of gender differences in voting. *Journal of Elections, Public Opinion and Parties*, 17(3), 235-61.
- [8]. Billiet, J. & De Witte, H. (1995). Attitudinal dispositions to vote for a 'new' extreme right-wing party: The case of Vlaams Blok. *European Journal of Political Research* 27, 181-202.
- [9]. Blais, A. & Turgeon, M. (2004). How good are voters at sorting out the weakest candidate in their constituency? *Electoral Studies*, 23, 455-461.
- [10]. Blais, A., Gidengil, E., & Nevitte, N. (2004). Where does turnout decline come from? *European Journal of Political Research*, 43(2), 221-236.
- [11]. Brunell, T.L. & DiNardo, J. (2004). A propensity score reweighting approach to estimating the partisan effects of full turnout in American presidential elections. *Political Analysis*, 12, 28-45.
- [12]. Ebube, O. (2014). The Nigerian Voter's Choice. "Icprsunmich.edu". Retrieved: August 20, 2015.
- [13]. Eijk, C. V., & Egmond, M. V. (2007). Political effects of low turnout in national and
- [14]. Engelen, B. (2007). Why compulsory voting can enhance democracy. *Acta Politica*, 42, 23-39.
- [15]. Epstude, K., & Roese, N. J. (2008). The functional theory of counterfactual thinking. *Personality and Social Psychology Review*, 12, 168-192.
- [16]. Franklin, M.N. (1999). Electoral engineering and cross-national turnout differences: What role for compulsory voting? *British Journal of Political Science*, 29, 205-224.
- [17]. Giger, N. (2009). Towards a modern gender gap in Europe? A comparative analysis of voting behaviour in twelve countries. *The Social Science Journal*, 46(3), 474-92.
- [18]. Glasgow, G. & Alvarez, R.M. (2000). Uncertainty and candidate personality traits. *American Political Science*, 30, 709-728.
- [19]. Haider, K.S. (2014). Punjab caste-system and voting behaviour. *Pakistan Vision*, 15(1), 144-179.
- [20]. Highton, B. & Wolfinger, R.E. (2001). The political implications of higher turnout. *British Journal of Political Science*, 31, 179-223.
- [21]. HRCP. (2008). *Human right commission of Pakistan. State of human rights: An annual report*. Lahore, Pakistan. 144.
- [22]. Inglehart, R., & Norris, P. (2000). The developmental theory of the gender gap. Women's and men's voting behaviour in global perspective. *International Political Science Review*, 21(4), 441-63.
- [23]. Inglehart, R., & Norris, P. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge: Cambridge University Press.
- [24]. Iversen, T., & Rosenbluth, F. (2006). The political economy of gender. Explaining cross-national variation in the gender division of labor and the gender voting gap. *American Journal of Political Science*, 50(1), 1-19.
- [25]. Kahneman, D. & Tversky, A. (1982). The simulation heuristic. In D. Kahneman, P. Slovic,
- [26]. Kahneman, D., & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological Review*, 93, 136-153.
- [27]. Kai-Yu, W., Minli, L., & Laura, P. (2010). Does thinking make it so? The effect of counterfactual thinking on product evaluations. *Advances in Consumer Research*, 37, 588-590.
- [28]. Knutsen, O. (2001). Social class, sector employment, and gender as party cleavages in the Scandinavian countries: A comparative longitudinal study, 1970-95. *Scandinavian Political Studies*, 24(4), 311-50.
- [29]. Kolawole, A. (2016). Analysis of the influence of opinion leaders on voting decision of rural voters: An evidence from Ayetoro, Ogun state of Nigeria. *Journal of Humanities and Social Science*, 21, 46-53.
- [30]. Kray, L. J., George, L. G., Berkeley, K. A., Gallinsky, A.D., Tetlock, P. E., & Roese, N. J. (2010). From what might have been to what must have been: Counterfactual thinking creates meaning. *Journal of Personality and Social Psychology*, 98, 106-118.
- [31]. Kray, L.J., George, L.J., Liljenquist, K.A., Gallinsky, A.D., Tetlock, P.E., & Roese, N.J. (2010). From what might have been to what must have been: Counterfactual thinking creates meaning. *Journal of Personality and Social Psychology*, 98, 106-118.
- [32]. Lockwood, N. J. (2013). International vote buying. *Harvard International Law Journal*, 54, 97-156.
- [33]. Luskin, R.C. (2002). From denial to extenuation and finally beyond: Political sophistication and citizen performance. In J. H. Kuklinski (ed.), *Thinking about political psychology*. Cambridge: Cambridge University Press.
- [34]. Manow, P., & Emmenegger, P. (2012). Religion and the gender vote gap. Women's changed political preferences from the 1970s to 2010. Working Paper No.01/2012. Bremen: ZeS.
- [35]. Markman, K. D., & McMullen, M. N. (2003). A reflection and evaluation model of comparative thinking. *Personality and Social Psychology Review*, 7, 244-267.
- [36]. Markman, K. D., Gavanski, I., Sherman, S. J., & McMullen, M. N. (1995). The impact of perceived control on the imagination of better and worse possible worlds. *Personality and Social Psychology Bulletin*, 21, 588-595.
- [37]. Markman, K. D., McMullen, M. N., & Elizaga, R. A. (2008). Counterfactual thinking, persistence, and performance: A test of the Reflection and Evaluation Model. *Journal of Experimental Social Psychology*, 44, 421-428.
- [38]. McGraw, K.M. & Pinney, N. (1990). The effects of general and domain-specific expertise on political memory and judgment. *Social Cognition*, 8, 9-30.
- [39]. Muhammad, H. J. (2013). *Psychosocial factors involved in voting decision making* (unpublished Mphil Dissertation). Department of Psychology Government College University Lahore.
- [40]. Muhammad, H. J., & Hasan, S. S. (2016). Development of the decision to vote scale. *Pakistan Journal of Social and Clinical Psychology*, 14(2), 10-14.
- [41]. Petrocelli, J. V., & Harris, A. K. (2011). Learning inhibition in the Monty Hall problem: The role of dysfunctional counterfactual prescriptions. *Personality and Social Psychology Bulletin*, 37, 1297-1311.
- [42]. Roese, N. J. (1994). The functional basis of counterfactual thinking. *Journal of Personality and Social Psychology*, 66, 805-818.
- [43]. Roese, N.J., & Olson, J.M. (1995). *What might have been: The social psychology of counterfactual thinking*. N.J.: Lawrence Erlbaum.
- [44]. Roese, N. J., Epstude, K., Fessel, F., Morrison, M., Smallman, R., Summerville, A. (2009). Repetitive regret, depression, and anxiety: Findings from a nationally representative survey. *Journal of Social and Clinical Psychology*, 28, 671-688.
- [45]. Schacter, D. L., Benoit, R. G., De Brigard, F., & Szpunar, K. K. (2013). Episodic future thinking and episodic counterfactual thinking: Intersections between memory and decisions. *Neurobiology of Learning and Memory*, 7427, 263-273.
- [46]. Shawar, D.E. & Asim, M. (2012). Voting behavior of people towards different political parties in district Faisalabad, Pakistan. *Mediterranean Journal of Social Sciences*, 3(2), 85-91 doi:10.5901/mjss.2012.v3n2.85
- [47]. Sherman, S. J. & McConnell, A. R. (1996). The role of counterfactual thinking in reasoning. *Applied Cognitive Psychology*, 10, 113-124.
- [48]. Smallman, R., & Roese, N. J. (2009). Counterfactual thinking facilitates the formation of intentions: Evidence for a content-specific pathway in behavioral regulation. *Journal of Experimental Social Psychology*, 45, 845-852.
- [49]. Studlar, D. T., McAllister, I., & Hayes, B. C. (1998). Explaining the gender gap in voting: A cross-national analysis. *Social Science Quarterly*, 79(4), 779-98.
- [50]. Venzke, I. (2014). What If? Alternative Realities of International Law. *ESIL Reflections*, 3, 1-5.