BANDWAGON AND UNDERDOG EFFECTS ON A LOW-INFORMATION, LOW-INVOLVEMENT ELECTION

DISSERTATION

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By

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* * * *

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ABSTRACT

The occurrence of bandwagon and underdog effects as a result of exposure to pre-election poll results has been widely studied from different theoretical perspectives and various research designs including surveys, experiments and experiment imbedded in surveys. The literature does not show a consensus as to the existence of these effects as the various research designs have yielded evidence of shifts towards the bandwagon or underdog, no evidence of statistically significant shifts, and effects that cancel out at the aggregate level. This study not only reviewed this literature in the traditional sense but also conducted a meta-research analysis to draw conclusions about the body of literature as a whole.

With this review of the literature as a starting point, an experimental methodology was designed to measure shifts in the direction of the bandwagon and underdog candidates among participants exposed to fictitious news stories about a local election. Stories about a County Commissioner race were devised, featuring two candidates of similar backgrounds and political platforms. The 282 participants read the first story, which provided an introduction to the race and the candidates, and immediately afterwards completed a pre-test questionnaire asking them who they would vote for if the election were held that day, and to specify the certainty with which they held their vote choice on a scale of 1 percent to 100 percent. Participants then read a second news story that presented poll results at the beginning or at the end of the story, in one of four
different percentage spreads ranging from 64 percent versus 32 percent to 48 percent versus 48 percent for the control condition. Their candidate choice and certainty of vote choice was measured again in a post-test questionnaire that also included measures of attention and attitudes towards pre-election polls. Results did not support the hypothesis that the size of the percentage spread between candidates and the position of the poll results in the news story would be significantly related to shifts among participants in the direction of the bandwagon or underdog candidates.
Dedicated to those who walked with me

Dedicada a aquéllos que caminaron conmigo
I am blessed to say that this degree has truly been a team effort, and that I had the best people in my team I could have hoped for.

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CHAPTER 1

INTRODUCTION

During the 2000 and 2004 presidential campaigns, the daily fluctuations in the lead of one presidential candidate over the other in the pre-election polls were given ample play on the media’s coverage of the campaign. The closeness of the race was made obvious by the multitude of daily tracking polls commissioned and published by a multitude of media outlets and conducted by various polling organizations.

In such electoral races where voters’ allegiances are almost equally divided between the candidates, does the wide publication of poll results affect the outcome of the election? Do they cause voters to switch their allegiance from one candidate to the other based on the candidates’ standing on the polls? Do voters use poll results as information to help them vote strategically?

What is the evidence regarding the effects that poll results can have on vote choice? Do leading candidates enjoy a bandwagon effect by having voters switch their choice based on the odds of winning? Or, do voters move into the underdog camp in order to increase their candidate’s chances of winning?

The answers to these questions are especially important today because the number of polls published as part of election coverage has grown exponentially during the past
couple of decades. According to Steinhorn (2000), the media published more than five times the number of pre-election polls in the seven-month period leading to the 2000 election than in the same period back in 1980. That is a total of about four polls per week, a figure that does not take into account the daily tracking polls that proliferated as the election drew closer. When the tracking polls were included, the number escalated to about seven polls per day. The proliferation of polling should instigate a desire to take a closer look at how their proliferation might interplay with other factors when it comes to choosing a candidate. Because of their ability to sway electoral outcomes, bandwagon and underdog effects should appear at the top of the list of the possible influences that polls might have on the electoral process.

The importance of understanding and finding evidence of the occurrence of bandwagon and underdog effects cannot be overstated in an era when political polling constitutes such a considerable portion of election coverage. Even unsubstantiated claims that these effects are occurring have spurred attempts at legislation to regulate the dissemination of poll results during electoral campaign media coverage. Some countries such as Canada, France and South Korea have gone as far as enacting bans on pre-election polling.

The ability of pollsters to predict election outcomes is also threatened by the possibility that their own predictions can affect the election outcome. If predicting a candidate as a winner causes voters to switch allegiance to this candidate or to rally for the underdog, the accuracy of elections outcomes predictions will suffer. Yet if we know
what are the conditions conducive to the occurrence of these effects, we might be able to create predictive models that take them into account.

In this introductory chapter, the concepts of bandwagon and underdog effects are defined and an exposition of the theoretical arguments for the occurrence of bandwagon and underdog effects is offered. An overview of media effects and social influence theories is presented to provide context to the research on bandwagon and underdog effects. The purpose of the study and a brief introduction to the following chapters in this document appear at the end of the chapter.

1.1 Bandwagon and Underdog Effects Theory

The term *bandwagon*, coined in 1855, refers to the caravan that carried the band of musicians in a circus parade, which usually led the other caravans in the procession. The term has been adopted by social scientists to label a situation when the desire to be in the majority can cause some people to adopt the majority view (Marsh, 1984a). Traugott and Lavrakas (1996) defined the bandwagon effect as:

“A ‘going with the winner’ effect that causes some voters, who otherwise would be expected to vote for one candidate, to support another candidate who the pre-election polls predict will win the election” (p. 172). A key element of this definition is the change in candidate preference due to exposure to pre-election polls.

The word *underdog*, dating back to 1877, is defined as the “loser or predicted loser in a struggle or contest.”¹ In the context of public opinion research, the underdog effect is defined by Traugott and Lavrakas (1996) as: “A ‘sympathy’ effect that

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¹ As defined in Webster’s Ninth New Collegiate Dictionary, 1991 edition.
apparently causes some voters who otherwise might be expected to vote for one candidate to support another candidate who pre-election polls predict will lose the election (p. 200).”

Allport (1924) explained that the bandwagon tendency comes from what he has deemed “social facilitation.” Social facilitation refers to “an increase of response merely from the sight or sound of others making the same movements” (p. 262). Furthermore, social facilitation fosters what he calls an “attitude of conformity” in which a crowd provides the individual with cues about its size and strength, cultivating the need to conform and submit to it on the individual.

The assumption on which the bandwagon and underdog theory rests is that “the voting behavior of at least some persons is a function of their expectations of the election outcome; published poll data are assumed to influence these expectations, hence to affect the voting behavior of these persons” (Simon, 1954, p. 245-46).

Ansolabehere and Iyengar (1994) proposed two explanations to why bandwagon and underdog effects might occur. One is “purely affective,” meaning that is human nature to prefer winners to losers. The other is that people might take poll results as an indicator of the judgments made by those who acquired the pertinent information about the candidates. “The polls are treated as a crude indicator of other voters’ judgments about the candidates’ strengths and weaknesses” (p. 415).

Fleitas (1971) explained that the characteristic that bandwagon and underdog effects shared was “their ability to persuade voters to respond to candidates on the basis of very little information” (p. 434). Based on this statement, he presumed that voters
would be more susceptible to bandwagon and underdog effects on the context of local elections, which are characterized by the minimal information provided to the public about the candidates. Others have made the same argument for primary elections (see Beniger, 1976). Marsh (1984b) claimed that, if bandwagon and underdog effects were going to occur, they had to occur in the context of primary elections because “it would be perfectly rational behavior on the part of the voters to use the information about a candidate’s potential to win before voting in a primary” (p. 580).

West (1991) postulated that mistrust and cynicism can contribute to an underdog effect. Since Americans have become more cynical towards leading institutions, including the media, they might resent being told by the polls (published by the media) that the race is over. He argued this might increase movements away from the candidate leading in the polls.

Mendelsohn and Crespi (1970) maintained that exposure to poll results will promote “projection effects” –which occur when people try to conform to what they think the opinion of reference groups important to them might be- only if the poll results give people information concerning the opinion of “their” salient reference groups. On the same line, Katz (1972) stated that: “It is not sheer numbers that produce and impression of majority opinion but the character of the majority in relation to the individual’s psychological group membership” (p. 24).

Lang and Lang (1984) reviewed the literature on the impact of polls on public opinion and formulated the following hypotheses regarding the occurrence of bandwagon effects: the effects are more likely to occur with regard to new topics and among people
with weak preferences, and are always matched by counterbalancing underdog movements. Similarly, Marsh (1984a) concluded that, to determine whether bandwagon effects have occurred, underdog effects have to be taken into account. She also concluded that bandwagon effects are influenced by the strength of beliefs about the views of the majority and that they are more likely to happen when the opinions of the majority are unexpected. Psychology, she indicated, provides evidence that surprising information has a more powerful impact that information that confirms what one already knows. This is a factor that has not been taken into account when conducting research on bandwagon and underdog effects.

Lavrakas et al. (1991) developed a profile of people who might be more likely to show bandwagon and underdog effects. Those who would be more prone to show bandwagon effects are younger adults who did not identify with the Democratic party, and people who were employed. On the other hand, women, liberals, people not affiliated with a political party, the unemployed and those with lower income were more likely to exhibit an underdog effect. They also found that people who reportedly made up their minds late in the 1988 electoral campaign were more likely to demonstrate the effects.

Traugott (1992) maintained that the analysis of bandwagon and underdog effects is further complicated by “the likelihood that they could occur simultaneously and might vary among different segments of the electorate” (p. 137). When looking at the aggregate level, he argued that it is quite possible that the effects might cancel each other out or turn out to be such a small net effect that it would not be statistically significant.
All these factors play a part in the voting decision-making process of the individual in different degrees. The influence of media polls is subject to the combined effects of all the other factors and, therefore, it is hard to isolate these effects in order to measure them.

The discussion above shows that the theoretical ground on which bandwagon and underdog research has been conducted is rich on hypotheses about what characteristics of the individual or what circumstances in an election provide the best setting for the occurrence of bandwagon and underdog effects. The overlying assumptions are that polls can have an effect on people’s voting decisions and that this effect can occur in the direction of the majority or the minority as presented in the polls.

Several factors at the individual level can come into play to determine how individuals might be affected by polls. These factors include age, political affiliation and ideology, gender, commitment to a candidate, trust in the polls, cynicism towards the media and other institutions, predisposition to one candidate or another, and how soon the voter makes up his/her mind in the campaign. Some circumstantial factors include the number of candidates on the ballot, the level of the election (e.g. primaries or presidential election), and the amount of information provided in the electoral campaign.

1.2 Factors at Play with Bandwagon and Underdog Effects

What are some of the conditions or factors that could determine the influence of polls on individual citizens? According to Hickman (1991), there are six factors at the individual level that are determinant in that regard.
The first factor is the citizen’s orientation to election decisions. He argued that strategic voters - those who will be more inclined to support a candidate based on their likelihood of winning - will be more readily influenced by polls. On the other hand, people who base their decisions on factors other than candidate viability — such as partisanship, ideology and character — are less likely to be influenced.

The second factor of poll influence is the available information, other than pre-election polls, that the individual has to make his decision. In other words, if a person can easily predict from other sources which candidate will win, polls will have minimal influence.

The third factor is the urgency of deciding promptly on whom to vote for. This urgency can be produced by different sources including time pressure caused by upcoming elections. In the case of urgency, polls provide summarized information regarding a likely winner. The reasoning is that if a candidate is “doing well” in the polls, it must be because he is an effective leader, or he is more liberal/conservative, etc.

The fourth factor is the individual’s strength of commitment to a particular candidate. Hickman posited that polls are likely to have the greatest impact on individuals who have low commitment to a candidate and lowest impact on those who are highly committed. The level of commitment means that the person has been able to reconcile all the available information about the candidates and this information has dissipated the doubts regarding the candidate of choice.

The fifth factor is the initial predispositions an individual has toward a given candidate. Polls are likely to have the greatest impact when “they are consistent with an
established, even ill-formed, disposition towards the candidates” (p. 107). Therefore, polls showing positive results for a candidate will have the greatest influence on people who already hold a favorable attitude toward a candidate, and vice versa.

The sixth factor is trust, which refers to the reliability and veracity that a person attributes to a poll. Hence, poll results will have a greater impact on individuals who trust polls. Trust in polls can decrease when the individual perceives conflicting information regarding the standing of candidates on different polls, or from sudden shifts in public opinion, or from polls failing to call the election accurately.

Polls can also be expected to have different effects on the various types of elections, and at different times on the campaign, depending on the dynamics with which they interact. Hickman (1991) is convinced that trying to find evidence of the impact of polls on presidential elections is an example of “barking up the wrong tree” (p. 108). He argued that during presidential elections, few voters exhibit the attributes discussed above, and therefore, are less likely to be influenced by polls.

During presidential election campaigns, voters are likely to be bombarded with information about their candidates other than poll results, which he stipulated are employed by voters in the absence of more substantial information. In addition, the evidence of strategic voting during presidential elections is scarce. In presidential elections, Hickman sustained, voting decision-making is guided by other factors such as political ideology, policy issues and incumbent performance. Moreover, he reasoned that voters’ inclination to interpret polls in favor of their political leanings makes it harder for polls to influence voters in the presidential election. Finally, he believed that polls will
be even more capable of affecting local elections for seats that do not attract media attention the way gubernatorial or even mayoral elections do. To paraphrase Hickman, voters will be hard-pressed to find out information about the candidates for county coroner in their local election.

In contrast, many characteristics of primary elections make them an ideal scenario in which polls could influence voting decision-making. Hickman explained that the role of ideology, partisanship and policy issues is undermined in primaries because the candidates belong to one party and often share similar positions on issues. Polls then become a more important tool for voters in distinguishing one candidate from another, turning candidate viability into a criterion by which to judge them.

Hickman also expected polls to have more impact earlier rather than later on an electoral campaign because, at that stage, voters will have low levels of commitment to candidates. In addition, voters who vote strategically will have scarce information at that point to help them decide, and polls can fill the information gap.

In conclusion, since polls are bound to become only more omnipresent in election coverage, we cannot ignore the impact they can have on the political process. The likelihood that bandwagon and underdog effects might be playing an important yet unseen part in the outcome of elections is a cause for concern for many. The possibility of the existence of bandwagon and underdog effects has many implications for our political process in terms of strategies used by voters and also by candidates in waging the war for votes. It also has implications for our ability to predict election outcomes accurately.
1.3 Individual Versus Aggregate Effects

The relatively scarce research on bandwagon and underdog effects has stretched itself into two camps: studies at the aggregate level and studies at the individual level. Traugott (1992) underscored the difficulties of measuring bandwagon and underdog effects at the aggregate level. Aggregate-level studies face the possibility of bandwagon and underdog effects canceling each other out, resulting in small net effects that are challenging to detect without the most powerful data analyses.

Individual level measurements, on the other hand, allow identifying individual differences between those who switch their preference to the bandwagon candidate and those that ally themselves with the underdog. In experimental designs at the individual level, bandwagon and underdog effects are easier to isolate because the direct effects of the stimuli on the dependent variable are not diluted by having subgroups in the sample that may pull in different directions.

1.4 Contemporary Perspectives on Media Effects on Public Opinion

The implications of the possibility of the occurrence of bandwagon and underdog effects in the realm of public opinion are manifold. First and foremost, the idea that, by publishing poll results, the media could influence the outcome of elections places the media in a very powerful role within the dynamics of elections. This possibility is quite plausible when examined from the perspective of the “not-so-minimal” media effects model which has enjoy preponderance among mass communication scholars during the
past two decades (see Iyengar & Kinder, 1987; Dalton, Beck & Huckfeldt, 1998). Proponents of the “not-so-minimal” media effects model have succeeded in documenting how the media frames the public discourse by telling people what to think about and making certain cues salient and, therefore, more available as tools for people to use when judging public issues (see Ansolabehere, Behr and Iyengar, 1993).

The theories of agenda setting, framing and priming have all been employed to identify ways in which the media can affect political thinking in the audience. The concept of agenda setting has generated vast amounts of research since Cohen (1963) declared that the media does not tell people what to think but tells them what to think about. Agenda-setting refers to the media’s capability of making issues more salient in people’s minds. By covering some issues and not others, the media establishes a issue agenda that the public follows.

The implications of the evidence of agenda-setting are very important for public opinion. In the context of elections, for instance, the issues that are selected by media outlets will receive more consideration in voter’s minds because they will be made more salient. When poll results are part of the daily election coverage, they can also become more salient in people’s minds. By being readily available for consideration, polls might be playing an important role on vote decision-making.

Priming is another effect of which the media has been found guilty. Priming refers to the media’s effect on what considerations people use when judging a candidate. By making some considerations more salient than others, these are more likely to be employed by individuals when making judgments about the candidate’s accomplishments.
and failures (Iyengar and Kinder, 1987). In the realm of elections, the media’s focus on the results of horserace polls could help or hurt a candidate as the marginals can become criteria by which to judge a candidate.

The evidence of these framing and priming effects have put a spin on the media’s active role in the public’s deliberation on issues. By the same token, evidence of bandwagon and underdog effects would force students of public opinion to recast media as an even more powerful factor in election outcomes than what is considered to this day.

### 1.5 Perspectives on perceptual influence

Seven public opinion perspectives deal with the influence of the perception of public opinion on people’s own opinions. These are: pluralistic ignorance (O’Gorman and Garry, 1976, Fields & Schuman, 1976), false consensus (Ross, 1977; Ross, Green and House, 1977), spiral of silence (Noelle-Neumann, 1984), third-person effect (Davidson, 1983), impersonal impact (Tyler and Cook, 1984; Culbertson and Stempel, 1985), and the looking-glass perspective (Fields & Schuman, 1976).

#### 1.5.1 The Pluralistic Ignorance Perspective

The pluralistic ignorance perspective is one of the most researched in the group of perceptual influence theories. Pluralistic ignorance occurs when the majority position is incorrectly perceived to be the minority position. O’Gorman and Garry (1976) posited that pluralistic ignorance occurs when individuals underestimate the proportion of others who think, feel or act as they do. According to them, this is more likely to occur in
larger, non-personal settings and to be more extensive in times of accelerated social change.

The pluralistic ignorance hypothesis is most concerned with perceptual accuracy. It is usually studied by asking people about their attitudes on a particular issue, then asking them what their perception is of the opinion of a specific group regarding that issue, and then studying the affect amount of discrepancy between one’s own cognitive opinion and one’s expressed opinion. Pluralistic ignorance usually occurs with divisive issues and it is based on the assumption that people have a quasi-statistical sense or perception of other’s opinion.

Allport (1924) coined the term pluralistic ignorance to define a situation in which virtually all members of a group privately reject group norms yet believe that virtually all other group members accept them. He was puzzled by finding widespread conformity to social norms that, in private, were rejected by group members. In his study of the Elm Hollow community, he found that people in the community would publicly support norms against gambling and drinking while violating these norms privately. Apparently, people were under the impression that other members of the community upheld values against these practices and, therefore, they reported supporting these values as well but revealed in private communications to the author that they engaged in these behaviors at home. This paradox occurred with those issues where people were less able to find out what the behavior of others was.

Latane and Darley (1970) used the pluralistic ignorance hypothesis to explain the behavior of people during emergencies. Their experiments attempted to understand why
bystanders did not react during emergencies, hypothesizing that the presence of others had something to do with it. They discussed the case of Kitty Genovese, who was repeatedly stabbed by a stranger in New York for over half an hour and in plain view of at least 38 of her neighbors, none of which did anything to help her. Latane and Darley tried to explain this phenomenon—which seemed unexplainable to many people—by arguing that people look at others in the crowd for indications that the event is actually an emergency and for cues on how to act. Moreover, when in a crowd, the responsibility to help gets diffused among the many people and, therefore, the individual feels less pressured to act.

Latane and Darley conducted experiments in which participants were asked to sit in a room and fill out a form while smoke was poured into the room through a vent. When people were sitting alone, they noticed the fire and notified somebody a lot quicker than when a confederate was sitting in the room with them and acting as if the smoke was not a big deal. The authors concluded that participants took their cues from the confederates and decided that, if these were not reacting, then it was probably not reason for fear. Participants remained in the smoke filled room until tears came down their faces, filling out their forms as if nothing was happening.

Moreover, Miller and McFarland (1987) posited that fear of embarrassment that can keep people from expressing their opinions if they think these are not socially acceptable. This may lead to reporting an opinion in the opposite direction of their true opinion and projecting their true opinion unto others, resulting in the disowning projection. O’Gorman and Garry (1976) might have found disowning projection in their
study of racial attitudes when people perceived attitudes as being more conservative than they actually were, perhaps projecting their own attitudes on those of others.

People’s perceptions of a conservative or liberal can be considered instances of pluralistic ignorance, if they involve misperceptions of others opinions on issues. These biases happen when people think that the opinions of others are more liberal or conservatives than their own. Fields and Schuman (1976) found that residents of Detroit, Michigan, thought that others in the area held more conservative opinions on issues such as allowing their children to play with black kids, atheists being allowed to speak in a college campus, and whether children should be allowed to refuse the pledge of alliance in school.

Similarly, Glynn (1989) found evidence of both disowning projection and ideological bias in her study of neighbors’ perceptions of others’ opinions on local, state and national issues. She found that individuals saw others living the city as more liberal whereas those living in their own neighborhood were seen as holding more conservative opinions than they did.

1.5.2 The False Consensus Theory

The false consensus theory refers to the tendency for individuals to see their own behavioral choices and judgments as relatively common and appropriate to existing circumstances while viewing alternative responses and behaviors as uncommon, deviant and inappropriate. It occurs when individuals overestimate the number of other people who agree with their views. Sometimes, it can be a special case of looking-glass
perception, according to Glynn et al (1999) when people are projecting their own opinions unto others.

Ross, Greene and House (1977) conducted a study with college students to determine their level of false consensus on many different issues. They found a significant level of false consensus among students in issues that ranged from thoughts on dying to preference of bread. Ross offered two explanations for this high level of false consensus. One was that it could represent intentional distortion resulting from selected exposure to and recall of other people who agree with oneself. Another one was that it could represent motivated and intentional strategy to appear normal and rational.

Sherman, Presson and Chassin (1984) proposed self-enhancement, motivation to view others as self, the need for social support and validation and the need to feel confident of one’s views and behaviors as explanations for the occurrence of false consensus.

False consensus also requires two conditions: an issue that is divisive and quasi-statistical sense of other’s opinions. When these two conditions result in bias towards exaggerated agreement with oneself there will be false consensus instead of pluralistic ignorance but there is no way of determining which one will occur according to Glynn et al (1999).

1.5.3 The Looking-glass Perception

The looking-glass perception is a phenomenon that structures perceptions of the opinion of others on social issues. Research indicates that in many situations and for
many public and social issues, people will feel that significant others hold the same opinions on issues that they hold. Occurs mostly on non-controversial issues or issues that people don’t care much about and for which there seems to be universal agreement.

The looking-glass perception can also occur when the true opinion is exactly the opposite to one’s own, which is most likely to happen when the issue at hand is divisive and one misperceives the others as in agreement with oneself (engages in false consensus). The looking-glass perception is assumed to operate quite apart form the actual distribution of opinion. Current findings indicate that in the absence of strong counter forces, a large proportion of people feel that others have opinions similar to their own on most public issues.

In many instances, the perceived majority opinion and the real one are the same and therefore the looking-glass perception is correct. When looking-glass perception occurs, there is a blockage of the quasi-statistical sense that results in a definition of perceptions of others as agreements with oneself. It’s not known why or when it occurs, not enough research has been done on the underlying factors since most research has focused on finding evidence of the existence of this perception.

Fields and Schuman (1976) found strong support for the looking-glass effect in their study about racial attitudes. They found that people are very likely to report that significant others such as spouses, children or parents are more likely to hold opinions like theirs. There is a conservative bias in people’s perceptions of others’ opinions but they could not find a tenable explanation for it. They concluded that it is likely that the
tendency to see agreement with oneself in the general public is a basic way of perceiving
the world in the absence of other information.

1.5.4 The Spiral of Silence Theory

The spiral of silence is one of the most studied theories of public opinion. One of
the process theories, it was first proposed by Noelle-Neumann (1984). She started
developing the theory as she studied the 1965 elections in Germany and found that public
perceptions of who would win the election were changing, independently of the polls,
causing voters to shift their preferences at the end of the race towards the candidate
people perceived as winner. She believed that for, the individual, it is more important
not to isolate himself from others than his own judgment. This perspective, which is the
closest to a theory, stems from the basic premises that we are social beings, that others
are important to us and we want them to like us, and that we want to fit in. Her theory is
important because it describes how through social interaction, people influence each
other’s willingness to express opinions. The social nature of human is important
component of the theory.

The spiral of silence posits that one who perceives that his opinion are losing
ground will be less willing to express his opinion and become more and more reserved
until they are silent. On the contrary, people who perceive their opinion as gaining
ground will voice their opinions in public more freely.

Four key elements operate in the spiral of silence are one’s opinion on an issue,
one’s perception of the predominant public opinion on the issue, one’s assessment of the
likely future course of public opinion on the issue and one’s willingness to support one’s opinion with action, verbal statements or other signs of commitment.

One’s opinion and one’s assessment of the predominant public opinion are both assumed to influence one’s judgment of the future course of public opinion. Willingness to express our opinion will be the product of the interaction between these two variables. The likelihood of one’s voicing one’s opinion will be determined by this interaction.

The spiral of silence is believed to occur in the context of high public uncertainty. Divisiveness on an issue of public interest coupled with an individual’s belief that a minority or different opinion isolates oneself from others can foster the occurrence of the spiral of silence. Other components of this theory are a “quasi-statistical sense” that helps an individual perceive the climate of opinion as well as estimate the majority and minority opinion and fear of isolation from social interaction. Finally, the theory posits that there is a hard-core group of people whose opinions are unaffected by other’s opinion. The spiral of silence has received much criticism based on the lack of a coherent theoretical thread on her research and by Noelle-Neumann’s failure to include reference groups as factors.

1.5.5 The Reference Group Theory

Reference group theory is based upon the principle that people take the standards of significant others as a basis for making self-appraisals, comparisons, and moving into various social realms (Hyman and Singer, 1968). A key aspect of the theory is the fact that individuals usually have the freedom to choose the reference groups they wish to
join. Equally important is the influence and status of groups, and the power groups possess, because they have the ability to admit or deny membership to their group.

The term reference group can refer to any and all groups that influence the attitudes and behavior of individuals. The theory is often used to describe two major types of relationships between individuals and groups: normative reference group behavior and comparative reference group behavior. Normative reference group theory is based on the idea that some reference groups teach individuals how they should behave, serving as a guide for individuals' behavior. On the other hand, comparative reference group theory posits that reference groups give individuals a basis for comparing themselves or their group to other individuals or groups. Comparative reference groups are also believed to influence individuals' feelings and behavior.

In terms of reference group theory and public opinion polls, Katz (1972) theorized that it is not the size of the majority that influences people’s opinions but the nature of the majority group in relation to the reference groups the person belongs to. Therefore, the reference group theory advocates that poll effects are mediated by people’s memberships in reference groups and how the opinion of that reference group is portrayed in the poll.

1.6 Purpose of the Study

The purpose of this study is to investigate if exposure to pre-election poll results can influence the voting decision-making process in terms of producing a bandwagon or an underdog effect at the individual level. The research design attempted to establish a causal relationship between exposure to pre-election polls and a shift in vote choice and
certainty of vote choice. It also strived to identify what factors contribute to the occurrence and the magnitude of bandwagon and underdog effects in the context of low-information low involvement fictitious election.

1.7 Overview of Chapters

Chapter 2 consists of the review of the literature, including a meta-research on bandwagon and underdog effects studies and a critique of methodological aspects of selected studies. Chapter 3 discloses the methodology of the study. Chapter 4 presents the results of the data analyses. Chapter 5 deals with conclusions, implications and ideas for future research.
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature on bandwagon and underdog effects features a multitude of approaches from various disciplines, all aimed at investigating this somewhat elusive phenomena. Mutz (1998) argued that, in the realm of the political effects of perceptions of mass opinion, the study of bandwagon and underdog effects are especially confusing. This confusion stems from the multiple methodological approaches to this research question, with studies ranging from casual observation to complex experimental and quasi-experimental designs” (p. 150).

This chapter features a two-part review of the bandwagon and underdog effects literature. The first part presents the design and results of a meta-research analysis conducted with 21 studies on bandwagon/underdog effects. The second section presents a critical review of the research methodology employed by a few studies that are the most relevant to the research design of this study.
2.2 A Meta-Research of Bandwagon and Underdog Effects

The purpose of this meta-research was to condense 21 empirical studies into theoretical conclusions to represent the current status of this research realm. Rogers (1985) posited that “the ‘whole’ of meta-research conclusions are often greater that the sum of the primary researches that are synthesized” (p. 15). One of the strengths of the meta-research method is the exhaustive nature of the literature review. Once one has established the boundaries of the scope of research, extra care should be exercised so that all the studies that can possibly fit into the boundaries is reviewed. This meta-research, conducted via a propositional inventory, is particularly useful for synthesizing bandwagon and underdog research due to the scarcity of replication in this area and the different conclusions many have arrived at about the existence of these effects.

First, this chapter outlines the criteria for selection of the studies and the resulting group of studies used for the meta-research. Second, it justifies and explain how each category on the propositional inventory was selected and operationalized and disclose the results for each of the categories, detailing the commonalities and differences between the studies and highlighting patterns in the data. Third, it summarizes the findings about the group of studies and, lastly, it concludes about what the findings mean in terms of future research on bandwagon and underdog effects.
2.2.1 Criteria for Selection

The studies analyzed for this meta-research paper are all published studies that used empirical data and an original research design to investigate bandwagon and underdog effects. Excluded were articles that summarized findings of various articles and those who pushed conclusions based on somebody else’s data. Some of the selected studies also tested hypotheses about poll effects on voting turnout but these were disregarded for the purposes of this paper.

The search for the articles was done using online sources such as JSTOR (Andrew J. Mellon Foundation’s Journal Storage Program database), Dissertation Abstracts, WorldCat, The Ohio State University OSCAR database, the Ohio Link database, the CIC (Big Ten) online database, and multiple databases provided by The Ohio State University Libraries website. The collection of articles was furthered in a snowballing fashion, with references from one article leading to others. Some of the studies were used for a previous historical paper on bandwagon and underdog research.

2.2.2 The Studies

The literature search yielded 21 studies. Methodologies included secondary analysis of data, experiments, experiments embedded in surveys and, in three cases, a survey (Lavrakas et al, 1991; Roshwalb & Resnicoff, 1971). One of the most popular methods, employed by nine studies, is the experiment (Allard, 1941; Ansolabehere & Iyengar, 1994; Atkin, 1969; Ceci & Kain, 1982; Fleitas, 1971; Goidel and Shields, 1996;
Hollander, 1991; Mehrabian, 1998; Mutz, 1992; and Navazio, 1977). Six studies used secondary data analysis for their research purposes (Bartels, 1985; Goidel & Shields, 1996; McAllister and Studlar, 1991; Schmitt-Beck, 1996; Skalaban, 1988; and West, 1991). Three studies used experimental surveys as their method (Cloutier, Nadeau & Guay, 1989; Marsh, 1984; Mutz, 1992). Two studies (Goidel & Shields, 1996, and Mutz, 1992) combined experiments and survey data in their research design and therefore are classified under both methods.


2.2.3 The Propositional Inventory

Reviewing the articles allowed formulating categories to condense the information provided in them in order to analyze them as a group. This process produced ten categories: original assumption, theoretical framework, hypothesis, dependent variable, independent variables, method, population and sample, analysis, findings and
conclusions. Each study was reviewed and information pertaining each of these categories was recorded in the appropriate column on the word table.

The analysis of the word table consisted of examining the findings about the existence of bandwagon and underdog effects in the light of the different categories summarized into the word table. This analysis allowed establishing patterns in the differences and similarities of these studies and how these affected their results.

2.2.4 Table Categories

The categories included in the table are described in the following sections.

2.2.4.1 Position on the Existence of Bandwagon and Underdog Effects

Since there seems to be no consensus on the existence of these effects, it was useful to establish where each study stood in terms of the existence of bandwagon and underdog effects. This classification category was identified as “position on existence of bandwagon and underdog effects.” As part of their literature reviews, ten studies concluded that bandwagon and underdog effects do occur (Ansolabehere & Iyengar 1994; Bartels, 1985; Cloutier, Nadeau & Guay, 1989; Fleitas, 1971; Goidel & Shields, 1996; Kaplowitz et al. 1983; Lavrakas et al. 1991; Mehrabian, 1998; Roshwalb & Resnicoff, 1971; Schmitt-Beck, 1996; Skalaban, 1988; and West, 1991). The remaining nine studies argued that the evidence of these effects was unclear (Atkin, 1969; Ceci & Kain, 1982; Dizney & Roskens, 1962; Hollander, 1991; Marsh, 1984; McAllister and Studlar, 1991; Mutz, 1992 and Navazio, 1977). In conclusion, more studies started out
from the assumption that there are bandwagon and underdog effects and therefore set out to measure them whereas a minority parted from the “confusing evidence” standpoint. This could mean that the perception among scholars in this field leans towards the existence of these bandwagon and underdog effects, however challenging their measurement is (see Lang & Lang, 1984; Mutz, 1992 and Traugott, 1992).

2.2.4.2 Theoretical Framework

The theories fueling the studies of bandwagon and underdog effects are so varied it is no wonder the difficulty of arriving to a consensus on the matter. Although all studies are testing the bandwagon/underdog theory, there are seven underlying theories among the studies.

Ansolabehere and Iyengar (1994) and McAllister and Studlar (1991) use the rational choice model, or “tactical voting,” as the basis for their studies. The rational choice model, when applied to voting decisions, states that voters rationalize their voting decisions in terms of the likelihood of a candidate winning the election, so as not to “waste” their vote (see Mutz, 1992). Moreover, voters consider the costs and benefits of voting, along with the probability that their vote will change the outcome of the election, when they are making up their minds about whom to vote for.

Atkin (1969), Navazio (1977) and Kaplowitz et al (1983) employed the “reference group theory” approach in their experimental studies. As explained by Atkin (1969), the “reference group theory” posits that “individuals frequently ‘refer’ their behavior and cognitions to the opinions, values and norms of a comparison group” (pp. 515-16).
Social psychologists propose that a voter may use some perceived groups as a “frame of reference” for his or her political world. Therefore, poll results that describe that report the preferences of a reference group (of the same socioeconomic status as the voter, for example) may be employed as a “reference point in his or her decision-making process” (p. 516).

Bartels’ (1985) study had “momentum” as its underlying theory. This theory poses the idea that “candidacies in decline tend toward further decline while candidacies with increasing support tend toward greater support” (Mutz, 1992, p. 152).

Various studies defied the traditional model of voter decision-making in favor of one that incorporates media as a cueing agent into the equation (Ceci & Kain, 1982; Dizney & Roskens, 1962; Fleitas, 1971; Goidel & Shields, 1996; Lavrakas et al. 1991, Roshwald & Resnicoff, 1971; Schmitt-Beck, 1996, and West, 1991). The traditional model poses a dichotomy consisting of “pre-committed voters” and “last-minute deciders” largely unaffected by the media (Ceci and Kain, p. 230). Challenging this, Chaffee and Choe (1980), as discussed in Ceci and Kain (1982), argued that “a significant number of ‘campaign deciders’ carefully follow election campaigns and make their voting decisions on the basis of this information” (p. 230). Chaffee and Choe concluded that the dichotomous model might apply to landslide elections but is not appropriate for close elections with a large number of undecided voters (p. 230). Fleitas (1971) further employed this challenge to the traditional model when he experimented with “minimal information elections” which do not involve the traditional awareness,
party identification and large amounts of information that pervade national elections, and where the media might play a very important role.

Some of the studies acknowledged the influence of “projection effects” in this area but only Skalaban (1988) approached his research through this theoretical frame. The projection effects theory states that an individual voter may base his or her expectations of who might win the election on his or her own voting preferences.

Hollander (1991) studied bandwagon and underdog effects parting from the “cognitive response/persuasion” theory. This theory suggests, as explained by Mutz (1992), that “one reason attitudes may shift when people learn of others views is because knowing the opinions of others induces people to think of arguments that might explain those other’s positions” (p. 158).

Marsh (1984) directed her research design by the agenda-setting paradigm “that the polls have their effect by telling people not so much what others think but as by giving an impression of what they think about” (p. 54). Mehrabian (1998) employed the psychology temperament model of Pleasantness, Arousability, Dominance combined with bandwagon theory in an effort to test for the interaction of these traits with bandwagon and underdog effects.

Mutz (1992) set out to explore these effects through the theory of “impersonal influence.” This theory deals with the influence of individual’s perceptions of other’s attitudes, beliefs or experiences on the person’s own. The others, in this case, are not “close friends and acquaintances” but “anonymous others outside of the individual’s realm of personal contacts” (p. 90).
Although the majority of the studies also based their methodology on the “bandwagon theory”, only Cloutier, Nadeau and Guay (1989) use it as their main theoretical frame.

In conclusion, the majority of the studies used media cueing in a variation of the traditional model of voting decision-making as their theoretical framework. The variety of theories underlying these studies points to the difficulty of obtaining consensus regarding the existence and magnitude of these effects.

2.2.4.3 Hypotheses

This is the one realm in which there is agreement between these studies. Across the board, the hypothesis is that polls have an effect on voting decisions. This is certainly qualified differently in each study. Hollander (1991), for instance, hypothesized that participants in his experiment would be greatly influenced by polls in low relevance situations. Cloutier, Nadeau and Guay (1989) posited that polls would have an effect on the movement of individual opinions towards the bandwagon or the underdog side. Schmitt-Beck (1996) went further and hypothesized that media’s publishing of the electoral strengths of parties and candidates, which he documented through content analysis, would contribute to shaping voters’ expectations and stimulate a bandwagon effect.
2.2.4.4 Dependent Variables

The dependent variable(s) is another aspect of the studies in which there is some variety. Eleven studies (Ansolabehere and Iyengar, 1994; Bartels, 1985; Ceci and Kain, 1974; Dizney & Roskens, 1962; Fleitas, 1971; Goidel & Shields, 1996; Lavrakas et al. 1991; Mehrabian, 1998; Roshwalb & Resnicoff, 1971; Schmitt-Beck, 1996 and Skalaban, 1988) use voting preference or voting choice as the dependent variable. These were collapsed because they do not differ so much in the operationalization as they ultimately measure whom the respondent will vote for. In these studies, the dependent variable measures were variations of the “who will you vote for” question, adapted to the method used in each study, for example, presented in ballots in experimental studies (Fleitas, 1971).

Another popular dependent variable was opinions and attitudes about a particular candidate (Ansolabehere and Iyengar, 1994; Atkin, 1969; Goidel & Shields, 1996 and Navazio, 1977). This was operationalized as the probability that a respondent liked something about the candidate (Goidel & Shields, 1996), respondents’ criticism of president Nixon (Navazio, 1977), and a thermometer feeling scale for Carter and Reagan (West, 1991).

Among these studies, there are also dependent variables based on issues (Atkin, 1969; Hollander, 1991; Kaplowitz et al. 1983; Marsh, 1984; Mehrabian, 1998; and Mutz, 1992). Marsh (1984) measured attitudes on abortion whereas Mutz (1992) did the same on attitudes about a variety of issues such as the death penalty and gun control.
Goidel & Shields (1996) and McAllister and Studlar (1991) used likelihood of voting as their dependent variable. McAllister and Studlar (1991), for example, used likelihood of voting for a particular party rather than a candidate in their study of British elections.

Two final variations of the dependent variable also appeared in the studies. Ceci and Kain (1974) measured attitude strength whereas Cloutier, Nadeu and Guay (1989) measured the movements of individual opinions in one direction or another.

Overall, voting preference or voting choice is the prevalent dependent variable in this group of studies. The fact that some studies used issue attitudes measures further complicates the search for consensus on the evidence of bandwagon and underdog effects because attitudes on issues differ from voting attitudes when it comes to candidates.

2.2.4.5 Independent Variables

A count of the number of appearances of various independent variables revealed a wide assortment of these among the studies. The ones that appeared the most were media exposure, party identification and political ideology. Media exposure was measured in six studies (Bartels, 1985; Goidel and Shields, 1996; Hollander, 1991; Lavrakas et al., 1991, Schmitt-Beck, 1996 and Skalaban, 1988). Party identification was measured or controlled for in five studies (Ansolabehere and Iyengar, 1994; Goidel and Shields, 1996; McAllister and Studlar, 1991; Schmitt-Beck, 1996 and Skalaban, 1988). Political ideology was accounted for in six studies also (Bartels, 1985; Goidel and Shields, 1996; Hollander, 1991; Lavrakas et al., 1991; Skalaban, 1988 and West, 1991). Political interest
was measured in four studies (Ansolabehere and Iyengar, 1994; Goidel and Shields, 1996; Schmitt-Beck, 1996 and Skalaban, 1988). As we can discern from this group, use of these variables corresponds to the use of models of political behavior that propose variables such as these as good predictors of voting preference. They tended to appear together in the studies.

Who the respondent thought was leading the polls was also measured by a few studies (Bartels, 1985; Cloutier, Nadeau & Guay, 1989; Lavrakas et al., 1991, Marsh, 1984; and McAllister & Studlar, 1991). This variable, which should provide great insight into the mechanisms of poll influence, was ignored by a majority of the studies.

Other variables measured or controlled for in these studies were ratings of issues such as the economy, past voting behavior, interpersonal communications about politics, and, each only in two studies, recalling polls (West, 1991; Lavrakas et al., 1991), following polls (Skalaban, 1988; Lavrakas et al. 1991), poll credibility (Hollander, 1991; Lavrakas et al., 1991), and respondent’s reporting being influenced by polls (McAllister and Studlar, 1991; Lavrakas et al., 1991). Scores on the traits of pleasantness, arousability and dominance were used by Mehrabian (1998).

The independent variables operationalized as stimuli in the experimental studies will be discussed below.

2.2.4.6 Methods

These studies under review used one of three methods for their research on bandwagon and underdog effects. For purposes of the discussion on population,
sampling and analysis, they were divided by method –experiments, surveys and secondary data analyses- and reported on accordingly.

2.2.4.7 Experiments


Selecting participants from college student populations raises concerns about the validity of findings based on this group. Mutz (1992) argued that “while student samples may be a useful population for studying psychological processes, levels of student political interest and involvement makes them problematic for studies of political attitudes” (p. 146). Although the goal of these studies is clearly not generalization to the voting population of this country, their choice of participants does not advance the search for generalizable patterns of influence of polls. Three of the studies that used this type of

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1 Navazio (1977) can be qualified as an experimental survey but it appears as an experiment throughout the literature.
convenience sample found effects; the other three found mixed or conditional effects. Of
the two experiments that did not recruit college students, one found mixed evidence and
the other did not find effects.

In conclusion, one cannot conclude that experimental evidence points towards the
existence of bandwagon and underdog effects for three reasons. First, only three studies
found significant evidence but their sample consisted of college students. Second, four of
the studies found mixed evidence of effects meaning that the effects occur only in a
determined scenario and conditional evidence, or that the effects occur only when the poll
results are accompanied by other stimuli. Third, half of the studies did not introduce or
control for the established predictors of voting behavior.

2.2.4.8 The Stimuli on Experimental Studies

The stimuli used as the operationalization of independent variables varied among
the experimental studies. Allard (1941) introduced poll results as a notice placed right
before questions on the questionnaire administered to the experimental group in his
study. Ansolabehere & Iyengar (1994) used stimuli in the form of TV news stories about
poll results. Atkin (1969) inserted information about fictitious poll results in the form of
realistic press release information in the questionnaires administered. In Ceci and Kain’s
(1974) study, participants received vocal information about candidate preferences of the
majority. Fleitas (1971) introduced poll results and qualitative information about the
candidates as the stimuli. The qualitative information was printed while the information
about polls was administered verbally during the experimental sessions. Hollander
(1991) prepared fictitious printed news articles containing false poll results. Mehrabian (1998) simply told respondents that one candidate was leading in the polls. Navazio (1977) inserted bullets with Nixon’s ratings in the experimental questionnaires he mailed out. In summary, approximations of real-life news stories and arbitrary vocal or written provisions of information are equally used by these studies. Incidentally, the use of stimuli in the form of fictitious printed or broadcast news stories did not differ from the use of vocal or written cues in terms of results.

What is the best stimulus for this type of manipulation? Ansolabehere and Iyengar (1994) tried to recreate as best as they could a real-life setting using real news stories taken from TV newscasts. The problem with this, they argue, is that it does not allow free manipulation of the leads of the candidates. On the other hand, the poll information provided vocally during the experimental sessions is far from resembling the actual way in which people receive this type of information, therefore triggering different mechanisms from the ones being studied. The cues inserted in questionnaires pose additional problems, as they can be readily interpreted as cues by participants, invalidating their effect, besides being unlike any real life stimulus operating outside the experimental setting. A closer to life and easier to manipulate stimulus might be the fabricated news stories, given that they are carefully compounded in order to eliminate any other sources of effects that are not being measured.

2.2.4.9 Experiments Embedded in Surveys

Cloutier, Nadeau and Guay (1989), Marsh (1984), and Mutz (1992) carried out experimental surveys. Contrary to what the “experimental survey” label implies,
Cloutier, Nadeau and Guay (1989) and Marsh (1984) did not select respondents randomly in order to obtain external validity.

In their aptly named “quasi-experimental panel survey,” Cloutier, Nadeau and Guay (1989) surveyed college students that were not randomly assigned to the experimental and control groups. However, they argued, the fact that they used two control groups to reinforce construct validity, they considered that their experimental design was a “pretty stringent test of the causal hypothesis linking the stimuli to the movements of individual opinions” (p. 211).

Mutz (1992) was the only researcher that took advantage of experimental manipulation and probability sampling in order to understand better these bandwagon and underdog effects. She drew a random sample of 480 adults in the United States and randomly assigned them to the experimental and control groups, increasing both the internal and external validity of her study.

On the other hand, Marsh (1984) drew a quota sample of 1,055 parents living with children at home, controlling for characteristics such as age, sex and working status. She reasonably argued that the strength of her research design did not lie in the random sampling of individuals but on the random assignment of these to the experimental and control groups.

2.2.4.10 Secondary Data Analyses

All but one of the studies that used survey data in their research design (Bartels, 1985; Goidel & Shields, 1996; McAllister & Studlar, 1991; Schmitt-Beck, 1996;
Skalaban, 1988 and West, 1991) analyzed data collected in previous surveys. The exception to this case was Roshwalb and Resnicoff (1971) who analyzed data collected on a survey conducted in collaboration with the American Broadcasting Company.

This widespread use of secondary data poses a problem in terms of the fact that the questions used in the previous surveys, although sufficiently tried and tested, were not specially tailored for the current studies. If the problem with lack of consensus on the existence of bandwagon and underdog effects lies in instruments that fail to measure the pertinent variables, then using these questions and their data perpetuates the problem.

Two studies, Skalaban (1988) and Schmitt-Beck (1996) analyzed data from panel surveys which can prove more useful is disentangling these effects from the other factors because the effects might occur over time rather than immediately.

Sample sizes for the secondary data analysis studies ranged from 900 to 11,456. Altogether these studies had data from 19,177 respondents. Of those, data from 14,879 respondents yielded statistically significant evidence of bandwagon effects, leaving only data from 5,702 to support the “no effects” hypothesis.

One of the strengths of these studies resides in the external validity that such large random samples provide to them. However, the complexity of the voting decision process can be grossly simplified by a cross-sectional study. Yet the ability to measure many intervening variables at the same time provides for the development of models of voting behavior that can easily incorporate media cues as part of the equation. The good news is that this group of studies is the one that employed the largest number of
independent variables in their analysis, controlling for traditional voting factors and introducing variables suspected to play a role in voting decision making.

In terms of findings, five of the secondary data analysis studies (Bartels, 1985; Goidel & Shields, 1996; McAllister & Studlar, 1991; Skalaban, 1988 and West, 1991) presented statistically significant results that point to the existence of bandwagon or underdog effects. Four of them analyzed data from the National Election Studies. Using data collected using the standardized NES questions may explain in part the consistency of results among these four studies (although the only one that did not use NES data also found statistically significant effects). These studies also introduced predictors of voting behavior as controls in their regressions as these measures are reliable and readily available from the NES.

Goidel and Shields (1996) conducted both and experiment and secondary data analysis for their study. The purpose of this was to demonstrate the influence of electoral expectations in individual-level voting decisions while also investigating possible effects at the aggregate level. This research design posed the benefits of the combination of methods but suffers from the fact that the experiment participants are college students.

2.2.5 Finding of Effects Across the Board

Studies that found evidence were those that introduced the largest number of independent variables and controlled for the traditional voting behavior variables such as ideology, party identification, media exposure, perceptions of state of public opinion and past voting behavior.
Three of the four studies that did not find bandwagon effects (Navazio, 1977; Mutz, 1992 and West, 1991) did not use voting preference as their dependent variable which may mean that the mechanisms that operate on voting preference decision making might be different from the ones used for criticisms of candidates or issue attitudes. Two of these three studies also did not control for any other variables and relied only in their independent variable operationalized as stimuli to predict changes in attitudes.

Studies that introduced different independent variables along with poll results as stimuli (Fleitas, 1971 and Marsh, 1984) found effects conditioned to the second independent variable, qualitative information about the candidate and about trends in public opinion rather than static snapshots of it.

2.2.6 Conclusions About Effects Across the Board

The conclusions drawn in some of these studies reveal discomfort with making definitive statements about the significance of the findings.

Conversely, others placed a great deal of faith on their research designs and therefore concluded, for example, that the closer a race is the larger bandwagon and underdog effects can be (McAllister & Studlar, 1991). Projection effects were mentioned in some of the concluding remarks as an important factor in the relationship between poll results in the media and voting choices or preferences.
2.2.7 Summary of Findings

The analysis of this group of articles showed a few distinguishable patterns in bandwagon and underdog effects research as follows:

- Indications of the existence of bandwagon and underdog effects occurred mostly in those studies that introduced predictors of traditional voting behavior into the models or controlled for them in experiments.
- Statistically significant support for the non-existence of these effects was found only in two studies that did not use voting preference as their dependent variable.
- Data from the National Election Studies produced very consistent results pro bandwagon and underdog effects among the studies that used these data.
- A lack of original questionnaire development and administration and a high reliance on National Election Studies data was found for studies using aggregate data.
- The studies that found significant effects came from different theoretical frameworks.
- Most of the studies that found evidence of effects started out from the position of existence of effects.
- The introduction of independent variables such as qualitative information about candidates can tip the balance towards bandwagon effects conditional to the presence of this other type of information.
- The evidence, whether clearly pro bandwagon and underdog, conditional or mixed, points more towards the existence of effects than against it.
• Support or refusal for the bandwagon and underdog hypothesis was independent of the method; rather each method produced mixed results.

• The studies that approached bandwagon and underdog effects through the voting choice or voting preference in candidate elections standpoint found statistically significant effects more often than those that dealt with issue voting.

• The use of an experimental or secondary data analysis design did not lead researchers to make broad statements about their findings. A tendency to carefully qualify their results was more the norm.

• Support for the underdog hypothesis was found in only two instances.

2.2.8 Conclusion of Meta-Research

The review of this group of bandwagon and underdog studies has brought to the front some of the problems that might account for the confusing state of this corpus of research today.

First, the lack of a common theoretical starting ground that has been repeatedly operationalized into a research design is obvious. Support or refusal of the hypothesis came from different theoretical models, which makes it hard to assess which one might be closer to discovering the mechanisms of these effects, as conclusions cannot be based on the evidence of one or a couple of studies.

Second, the different approaches to the study of these phenomena –dependent variables, methods, operationalization of independent variables- accounts for the array of support, conditional support and rejection of the hypothesis. It is hard to arrive at
conclusions if what is being concluded about is not agreed upon. The problem is that research designs have scattered in different directions, with hardly a couple of studies approaching the phenomena in a similar enough manner. It is necessary to explore the nature of these effects in minimal information elections dealing with issues too, yet some of the studies have attempted to shed light on the relationship of poll reporting and voting decisions parting from the vastly different realm of issue voting.

Third, the dependence on readily available data from NES is probably hampering the birth of new approaches to the operationalization of bandwagon theories. It is understandable the advantages that these data present to the researcher yet secondary analysis of data ultimately limits the researcher in terms of the relationships she or he can explore.

Furthermore, experimental surveys, which provide the advantages of both surveys and experiments, are being largely ignored as a method for researching bandwagon and underdog effects. Other methods, when used separately, can only accomplish so much in terms of generalizability of their results and disentangling the effects in the minds of the respondents or participants, yet they are far more popular for this type of research.

A heavy reliance on college students as participants in experiments is making more difficult arriving at a consensus about these effects. A bigger effort can be made to recruit non-student citizens that would provide more randomly distributed characteristics in the experimental and control groups. The experimental conditions in which some of these experiments occurred also deviate so much from real-life that makes it even harder to attain validity to their results. An example of this is when the poll results cue was
delivered as a speech in front of the class right before filling out questionnaires, as if the
salience this would provoke on the student’s minds would even come close to how it
would work outside the classroom. Better attempts were made to simulate real-life
conditions, yet these were the exception rather than the norm.

Bandwagon and underdog effects are probably one of the hardest to study
phenomena out there because they deal with many factors that not only are hard to
measure reliably but are hard to manipulate in experimental conditions. It is probably
both benefiting and suffering from the variety of approaches used in the undertaking of
this research. That is what makes it an extremely fertile ground for the development of
theories and the refining of methodologies. That some, like Traugott (1992), think that
the measurement of bandwagon and underdog effects is impossible given the nature of
the research design it would entail to reliably and validly assess them, should serve as
encouragement to pursue rather than a reason to abandon the efforts.

2.3 Methodological Issues in Bandwagon and Underdog Effects Research

The literature on bandwagon and underdog effects is not extensive if we consider
the fact that interest in what effects pre-election polls could have on the public’s voting
preference and voting turn-out dates back to the 1960’s. Below, I discuss some of the
main studies dealing with bandwagon and underdog effects, focusing on those that are
particularly relevant to this research design. This critique is mainly targeted at the
methodological aspects of the studies, with special emphasis on experimental stimulus.
In 1964, Klapper conducted his *Bandwagon: A review of the literature* (1964), a memorandum commissioned by the Office of Social Research of the Columbia Broadcasting Corporation to address two questions: whether broadcasting election results from the East Coast affected the vote on the west coast and if there was any evidence for bandwagon effects. His review of the literature, which included books, journal articles and personal communications, is extensively cited as a valuable summary of research up to that date. However, the fact that his research was being sponsored by the Columbia Broadcasting Corporation, should be kept in mind when reviewing his findings.

A more specific goal of Klapper's review was to find indications of a causal relationship between publishing polls results and vote intentions and, in the case that there was one, to ascertain in which direction the causal relationship occurred. His goal notwithstanding, Klapper excluded experimental studies from the review, with a very limited number of exceptions (e.g. Cook and Welch, 1940). According to him, these studies are “so unlike the naturalistic situation in which voting intentions are developed and acted upon that their findings cannot [sic] be regarded in and of themselves as indicative of what occurs within the naturalistic voting situation” (p. 7). Somehow, surveys met his criteria better and, hence, these constitute almost the totality of the studies reviewed by Klapper. Nowhere in his memorandum there is an explanation of how causality could be ascertained using aggregate data. The superiority of experimental designs for establishing causal relationships is completely ignored in the memorandum. Instead, Klapper relied on survey findings and personal communications with pollsters.
who would obviously argue against the existence of the effects since their own industry was the target of the investigation.

Incidentally, Klapper found no clear evidence for the existence of bandwagon effects in the literature he reviewed. He stated that “no clearly valid empirical data was advanced in support of these charges and in fact most accusers proffered no empirical data at all” (p. 47). The literature, he found, favored the assumption that some individuals succumb to bandwagon effects while others are simultaneously engaging in projection but for the most part, results were not statistically significant (see also Mendelsohn and Crespi, 1970).² He did not discount the possibility of the existence of the bandwagon effect but avoided reaching a verdict because of a lack of conclusive evidence on both sides of the issue. Given the fact that experimental studies are better suited for finding evidence of bandwagon and underdog effects, by excluding these from his review, Klapper introduced bias on the conclusions of his investigation into the existence of bandwagon and underdog effects.

Much more recently, Mutz (1998) discussed the conflicting nature of bandwagon and underdog effects. The conclusions of her review of the literature are not far from the ones discussed above yet she went further by adding that the focus of bandwagon and underdog research has been limited in scope, leaving out other possible influences of polls such as voting turnout.

² Klapper defines “projection” as the process through which vote intention determines expectation.
2.3.1 Experimental Designs

Because of the nature of the phenomena, an experimental design is ideal for detecting the occurrence, size and magnitude of bandwagon and underdog effects. The main purpose of bandwagon and underdog research is establishing causality, to determine if exposure to public opinion polls can cause shifts in voting preference. These shifts can only be measured accurately and reliably by using highly sensitive instruments that can account for small but statistically significant shifts or changes in voting preference. Moreover, experiments allow for the full and precise manipulation of the independent variable that is essential for the type of "stimulus-response" model in which bandwagon and underdog research is based. This manipulation can help determine if the effects occur, and, if so, what is the threshold for their occurrence and when is this threshold reached.

Experimental studies in bandwagon and underdog effects literature have been scant but nonetheless these outnumber studies employing cross-sectional data. In the meta-analysis discussed above, at least nine studies that collected data by conducting experiments were identified. This might be an indication of the growing recognition of experimental designs as the best suited for bandwagon and underdog effects research. Nevertheless, some of the experimental designs employed by researchers have not fully exploited the advantages this method offers in terms of achieving validity. This is especially evident in the construction of the stimuli.

An example of this is Mutz’s (1992) attempt to simulate the effects that representations of opinions might have on attitudes toward social issues representing
different levels of commitment. Her experimental design was aimed at activating different types of “motivations” that can come into play because of exposure polls results. Mutz’s experiments were imbedded in surveys. The cues featuring poll results were delivered over the phone to the subjects early into the half-hour survey, and the opinions of the respondents were requested right afterward.

The research design in Mutz’s study took into account many factors that might be operating in this kind of situation. Yet her design lacks mundane realism. The kinds of cues being delivered over the telephone are usually picked up from sources such as newspapers, in daily conversation, or from the TV newscast. They will come along with a package of other information that will compete for the attention of the individual, it will not be privileged and arrive unaccompanied. The effects that the cues in this experiment might have on individuals will not be watered down and might appear stronger that they would exist outside of the experiment. This is acknowledged by Mutz on the discussion of the results, which showed statistically significant evidence of the influence of the cues on respondents’ opinions.

Navazio (1977) measured bandwagon effects in the context of presidential ratings, on the Nixon presidency in particular. He mailed out questionnaires containing statements which immediately preceded the voting preference question. Similarly, Allard (1941) reported the results of polls as statements immediately preceding questions on the tests given to the experimental participants. Some of these statements mentioned Gallup as the pollster while others invoked a national publication as the commissioner of the poll. Taking into account that the members of the control group might have been
exposed to the same poll results as the experimental groups, Allard included a question about which published polls results control participants were exposed to recently. This experiment found some evidence of shifting towards the predicted winner.

This type of stimulus is even more questionable than Mutz’s discussed above. In Navazio (1977) and Allard (1941), the purpose of the stimulus could have been plainly obvious to many respondents. Having the stimulus right before the question will, again, produce effects that might be more significant than those produced by everyday cues. Having the cue printed in the questionnaire would be more impacting than delivery by phone because the respondent will be readily exposed to the cues as he or she answers the question and can refer back to the cue.

Ceci and Kain (1982) used a slightly different approach to the introduction of the stimulus. In their experiment, college students were briefed on the results of a recent public opinion survey of college educated persons that showed Carter leading Reagan by a considerable spread, prior to the administration of a questionnaire. Following this, subjects answered questions regarding voting preference. Then, a second wave of interviewing, this time by telephone, delivered bogus poll results from Louis Harris Poll with Carter leading Reagan, Reagan leading Carter, or just mentioned the poll without giving out results.

In Ceci and Kain’s experiment, the stimulus employed a well-recognized polling agency’s name as the origin of the poll results. The credibility of this agency might have had an effect on the ability of the stimulus to affect the respondents’ voting preferences. In effect, the study found a measurable change in the subjects’ opinions after the second
wave of interviewing. Along the lines of Navazio (1977), this study also makes poll results much more salient than they would be in real life situations.

Lavrakas, Holley and Miller (1991) took advantage of a panel survey design to test for bandwagon and underdog effects in the 1998 election using a randomly selected national sample of adults. Half of their weekly sample was told which candidate (Dukakis or Bush) was leading in the polls before being asked which candidate they would vote for. Each week, the wording of the stimulus was slightly changed to reflect the current poll results in the media, using phrases such as “small lead”, “very small lead”, consistent but narrowing lead” (p. 182) to describe Bush’s lead over Dukakis during this pre-election period. The authors used discriminant analysis to predict which candidate this people in the half sample would have voted for had they not been told about the lead Bush had over Dukakis. Based on these predictions, they found both bandwagon and underdog effects, with three times as many persons exhibiting the underdog effects as those exhibiting the bandwagon effect. Significantly, during post-election interviews, a high percentage of people who exhibited the underdog effect reported voting for the underdog candidate in the election.

Lavrakas et al’s study design is strong in many respects. It uses a national random sample of adults and standardized telephone interviewing procedures to maximize response rate. But one of its most valuable contributions to the bandwagon and underdog effects literature is the mundane realism of the design that not only focused on a real, current presidential election but also employed stimuli that reflected current shifts in public opinion.
Atkin (1969) characterized the stimulus in his research design as “realistic-appearing news release” (p. 516) that reported the supposed findings of an earlier taken poll of students. The results were inserted into the test booklets used in the second session of the experiment. It is unclear from the article the format in which these “findings” appeared or if they were accompanied by any other type of information pertaining the issues in question: voting preference for McCarthy or Robert Kennedy, a 10% income tax surcharge, reopening the Warren Commission investigation and the legalization of marihuana. Atkin selected these issues because he anticipated students would be relatively familiar with them and he perceived a “generally even distribution” of support among students for either side of this issues and voting preferences. A third of the students participating in the experiment received positive poll reports on their booklets, another third received negative results and the remaining third did not receive any report of poll results.

In this case, in which the bogus poll results reported student’s opinions, the cue might have been more credible even though the source of the poll was not mentioned. Students might have thought that the researcher had access to this information and might have had no reason to doubt it. Moreover, the fact that the poll is reporting the opinions of their immediate peers might have triggered more powerful effects than, say, a report of what Americans think about these issues. Accordingly, the study found significant bandwagon effects. Yet, in the context of researching the bandwagon effect, this approach is even further away from the process that might operate when people are exposed to pre-election polls.
Fleitas (1971) combined poll results and qualitative information in the form of presentations in his research design. The poll results were manipulated to reflect different poll margins and compare their effects on vote choice among the students. First, the candidates were introduced to the students via a printed pamphlet containing background information and quotes from the candidates. Then, students witnessed four presentations of information about the candidates, two including poll results and two including qualitative information. Each presentation was followed by a ballot. Before each ballot was taken, students were informed of the results of the previous ballot.

After the first ballot was taken, students were informed of a 52-48 spread between the candidates. With only the previous ballot’s results as new information, a second ballot was taken. Students were then informed that the front-runner had increased his advantage to 71 percentage points versus 29 for his opponent. This dramatic increase in the lead was explained to the participants as the result of administering “secret information” about the candidates to half of the participants just before taking the second ballot when, in truth, they had not received this information.

After the second ballot participants were divided into three groups. One group was polled after receiving only the 71-29 ballot results while the other two groups received new qualitative information about the candidates. A third ballot was taken and all three groups were informed that now the spread was 69-31, a change of only two percentage points from the previous ballot. Before the fourth ballot was taken, two groups learned about the party affiliation of the candidates.
Fleita’s research design provided the opportunity to compare the effect of polls results by themselves and when combined with qualitative information. It also accounted for the possibility that different spreads between the candidates could cause effects of different magnitudes. Fleitas’ study showed that poll results alone failed to elicit change in voting preference but were effective when accompanied by qualitative information about the candidates.

Fleitas’ design allowed him to isolate the effects and compare to the effects of qualitative information that is also abundant during the election. However, it is not clear how the experimental sessions were carried out in terms of time. I believe that the dynamics of the experiment will also depend on the amount of time between the delivery of the stimulus as well as on the quality of it. For instance, being bombarded with poll results after poll results based on the same immediate reference group is different from receiving poll results via the media where the individual may or may not choose to pay attention to the information.

Some of the experimental studies have done a better job in the conceptualization of the stimuli. Using desktop publishing software, Hollander (1991) created pages resembling real newspaper pages that included news articles about the issues he was measuring. The stories contained poll results on the issues along with other qualitative information. The two bogus stories were read by students in a classroom setting and then their vote choice for the issues at hand were measured. Hollander acknowledged that, even when the stories were made to look like real stories, the fact that they were administered on their own added artificiality to the experiment. Along the same lines,
Lavrakas and Schenck (1991) employed fabricated news stories about candidates running for office in a fictitious county. These fabricated stories facilitated the random manipulation of the poll results as well as characteristics of the candidates such as gender that might have influenced the results. This type of stimulus provides a better approximation of real-life exposure to poll results where polls usually appear in conjunction with other qualitative information about candidates and races.

Similarly, Ansolabehere and Iyengar (1994) designed experiments that resembled real-life media exposure quite remarkably. The stimulus consisted of newscasts in which they introduced stories that reported poll results. The margin by which a candidate was leading another was manipulated to test for possible effects of margin size. Participants were invited to attend sessions in a laboratory that looked more like a living room, complete with sofas, coffee table, magazines and snacks. The participants usually arrived accompanied by a friend, family member or coworker, which added to the casual, relaxed atmosphere of the experimental quarters. The participants were recruited from the community, rather than using college students, and their demographics matched those of the general population of their community (greater Los Angeles). The study found that participants became more positive towards the leading candidates presented in the newscasts.

This type of stimulus lends greater validity to the experimental study of bandwagon and underdog effects. Here, participants, though not exactly at home, were provided with the things that might distract them when watching TV newscasts at home such as other’s company, reading material and food. Furthermore, the poll results were
inserted into taped newscasts that appeared normal. The stories reporting the poll results were real stories from the ongoing electoral campaign.

### 2.3.2 Conclusion

It is encouraging to see that the later experimental studies on bandwagon and underdog effects have incorporated stimuli that resembles real-life exposure to polls more accurately. This review of the literature reveals a trend in which earlier studies relied on more straightforward and direct delivery of poll results to the experiment participants while later studies have gone to greater lengths to approximate real-life cues in the development of their stimulus. Further research on the bandwagon and underdog effects should follow the path that has been undertaken by Hollander (1991), Lavrakas and Schenck (1990), and Ansolabehere and Iyengar (1994), and develop even more sophisticated research designs that take into account how the public is exposed to polls results as reported by the media.

Chapter 3 describes the study research design. This design incorporates elements from the past studies that were thought to be best suited for bandwagon and underdog research after the examination and analysis of the body of literature as presented on this chapter.
CHAPTER 3

METHODOLOGY

3.1 Introduction

As discussed Chapter 2, an experimental design is best suited to investigate the occurrence of bandwagon and underdog effects (Ansolabehere & Iyengar, 1994; Traugott, 1992; Mutz, 1992). Hence, the research design for this dissertation is a true experimental design.

The experimental design consisted of a within-subjects approach using “fabricated” news stories featuring poll results as the experimental stimuli. The purpose of this approach was to investigate how exposure to the poll-related information in the fabricated news stories could impact an individual’s decision to vote for or against a candidate and the strength with which the respondent held that vote choice.

The study followed a pretest-posttest control group design (cf. Campbell & Stanley, 1968). In addition, the study attempted to identify factors that might interact with the stimulus in determining the magnitude of the effect by measuring them using pre-test and post-test questionnaires.

This study furthered Lavrakas and Schenck’s (1990) experimental design in which they used fabricated news stories about candidates running for office in a fictitious county election. Their within-subject experimental design allowed them to study how
these effects might occur at the individual level in the context of candidate elections and to study the contextual factors that can cause the effects. They found that both bandwagon and underdog effects occurred within the context of a single election and that a wide leading margin can create a more powerful effect in these directions. They suggested the incorporation of other independent variables try to predict when these effects are more or less likely to occur.

This chapter discloses the experimental design of the study, presents arguments about the internal and external validity of the research design, identifies the independent and dependent variables of interest, and delineates the study hypotheses.

3.1 Experimental Design

This section describes the experimental design for the study. First, the role of Hickman’s factors in the design of the study is explained. Then a description of the experimental stimuli is provided. The protocol for the experimental sessions is detailed, followed by a description of the study respondents.

3.1.1 The Role of Hickman’s Six Factors in the Research Design

Hickman’s six determinant factors for the occurrence of bandwagon effects and underdog effects were instrumental in the research design. The county coroner race was selected as the focus of the stories consistent with Hickman’s assertion that low-information races are more likely to be affected by polls than those that attract media...
attention and therefore provide respondents with much more information in which to base their vote choices.

To keep respondents from basing their vote choices on ideological or political affiliation cues, no such information about the candidates was provided in the stories.

Another factor is available information the person has to make their decision. In this design, no other information about candidate viability was provided to the respondents, the poll was the only source.

Another factor is the urgency or the time pressure for the person to make a choice. This factor was incorporated into the design by limiting the experimental sessions to not more than 20 minutes during which the respondents had to read the news stories and make their vote choices.

The level of commitment factor, which hypothesizes that low-commitment individuals are more likely to be influenced by the poll, was incorporated by measuring the certainty of vote choice before and after exposure to the poll results. This allowed certainty of vote choice to be used as a predictor in the analyses.

The factor of trust in polls was operationalized as a series of questions about respondents’ assessment of poll accuracy, usefulness, and past usage during presidential election.

Booklets containing the news stories featuring the experimental stimuli and the pre-test and post test questionnaires were prepared for each of the eight experimental conditions. The booklets were organized in stacks of one through eight for distribution to
respondents. This ordering allowed for the random assignments of participants to the experimental conditions. This process is described in more detailed later in this chapter.

3.1.2 The Fabricated News Stories

The experimental design for this study employed fabricated news stories about a fictitious local electoral race for county commissioner. The stories were written following a journalistic style and displayed in a page laid out to resemble newspaper layout.¹

The first story included an introduction to Pat Johnson and Chris Stewart, the two fictitious candidates for county commissioner in Franklin County, Ohio. The timing of the County Commissioner election was presented as upcoming in the news stories but no specific date was provided.

The stories contained information about the candidates’ background and their political platform. To reduce the effects that candidate gender may have had on respondent’s vote choice, both candidates were created male. In order to not have it be a confounding factor in the research, no mention of their political party affiliation or political ideology was included in the stories. Candidates were given fairly similar backgrounds in terms of education, family composition, work experience and volunteer activities. Quotes from the candidates about their political platform were included.

Candidate Pat Johnson was introduced on the first half of the news story, candidate Chris

¹ The researchers’ education in journalism as well as her experience working as a journalist facilitated the writing of the news stories. Various drafts of the stories were prepared and revised in conjunction with Dr. Paul Lavrakas, to ensure the content of the stories was the most appropriate for the experimental design.
Stewart was introduced on the second half of the story. All booklets featured the same first story, which was titled “County Commissioner race begins.” (See Appendix A for a copy of the story.)

Eight versions of the second news story, which included the experimental stimuli, were designed to feature one of the four poll results spreads in the second and third paragraphs of the story or in the last paragraph of the news story, as is explained below. All versions of the second news story included the following facts about the pre-election poll for the County Commissioner race:

“A poll released yesterday shows that, if the election were held today __ percent of registered voters in Franklin County would vote for Chris Stewart and __ percent would vote for Pat Johnson. Four percent of registered voters reported being undecided as to whom they would vote for. [sic]. The poll, conducted by the Ohio State University Center for Survey Research over a period of one week, interviewed 805 randomly sampled registered voters in Franklin County. The poll had a margin of error of 3 percent and a response rate of 70 percent. The poll was subject to other survey errors that might have minimally affected the results such as interviewer error.”

Both versions of the second news story also featured information about the electoral campaign each candidate was carrying on in Columbus, Ohio. The title of both versions of the second news story was “Candidates take it to the town.” (See Appendix A for a copy of the story.)

The stories were written in a journalistic style much resembling the language and organization of electoral campaign stories in newspapers. By following the model of newspaper stories as faithfully as possible, the mundane realism of the experimental design was strengthened. Mundane realism refers to the extent that the elements of a research design resemble events in everyday life. The stories provided the best
opportunity to increase the mundane realism of the design given that it was not possible to mimic real life in the timing between exposure and measurement.
3.1.1 Experimental Manipulations

Factor 1: Pre-election poll results spread between County Commissioner candidates Chris Stewart and Pat Johnson

- 48% Stewart versus 48% Johnson
- 49% Stewart versus 47% Johnson
- 56% Stewart versus 40% Johnson
- 68% Stewart versus 32% Johnson

Factor 2: Position of poll results in story

- Beginning of the news story
- End of the news story

Combined stimuli yielding 8 conditions in the 4 x 2 factorial design

- Poll results of 48% Stewart versus 48% Johnson placed at beginning of story
- Poll results of 49% Stewart versus 47% Johnson placed at beginning of story
- Poll results of 56% Stewart versus 40% Johnson placed at beginning of story
- Poll results of 68% Stewart versus 32% Johnson placed at beginning of story
- Poll results of 48% Stewart versus 48% Johnson placed at end of story
- Poll results of 49% Stewart versus 47% Johnson placed at end of story
- Poll results of 56% Stewart versus 40% Johnson placed at end of story
- Poll results of 68% Stewart versus 32% Johnson placed at end of story

Table 3.1: Experimental manipulations featured in the news stories.
Table 3.1 presents the two experimental manipulations employed in the 4 x 2 factorial design: (1) spread between candidates’ percentages in a pre-election poll and (2) the placement of the poll results within the news story. The news stories featured four different spreads in the poll results, as follows:

- 48% Stewart versus 48% Johnson with 4% of those polled undecided
- 49% Stewart versus 47% Johnson with 4% of those polled undecided
- 56% Stewart versus 40% Johnson with 4% of those polled undecided
- 68% Stewart versus 32% Johnson with 4% of those polled undecided

The rationale behind the size of the increments was to investigate if the size of the spread is related vote choice and certainty of vote choice. The “control” spreads of 48% versus 48% and the 49% versus 47% spread - when taking into account the poll’s margin of error of 3% as reported in the story- displayed the candidates as being in a statistical dead heat. The other two spreads, 56% versus 40% and 68% versus 32%, gave an advantage to candidate Stewart over candidate Johnson, with the 68% versus 32% spread exhibiting the most pronounced difference between the candidates’ share of the vote.

These four different spreads in the poll results were placed either at the beginning of the story or at the end of the story. Thus, half of the booklets for each condition featured the poll results at the beginning of the story while the other half of the booklets
featured them at the end of the story. The rationale behind the different placement of the poll results was that poll results placed at the beginning of the story would be given more weight by respondents by virtue of their prominent position in the story, which by journalistic standards awards it more weight than any other position in the story, particularly more weight than information placed at the end of the news story.

3.1.2 The Booklets

The stories and questionnaires were laid out into a ten-page booklet printed on 11” by 17” paper folded in the middle. The booklet was organized as follows:

- Cover Page- Title: Race for County Commissioner Study
- Page 2- Intentionally blank
- Page 3- First story
- Page 4- First page of pre-test questionnaire
- Page 5- Second page of the pre-test questionnaire
- Page 6- Intentionally blank
- Page 7- First page of post-test questionnaire
- Page 8- Second page of post-test questionnaire
- Page 9- Third page of post-test questionnaire
- Back cover- Recall questionnaire
The pre-test and post-test sections of the booklet were sealed separately so that respondents would read the stories and complete the questionnaires in the right order. Recall questions were placed on the back cover of the booklet with the intention that respondents would refrain from looking at the news stories inside the booklets for help in answering those questions.

3.2 Study Hypotheses

Three hypotheses were central to the design of this study and were tested with the data collected during the experimental sessions. The first of the main hypotheses posited that there would be a relationship between the pre-election poll results featured in the story and respondents’ voting choices after reading the second story and the amount of shift on certainty of vote choice depending on which of the poll results were included in the news story to which a respondent was exposed.

The second hypothesis stipulated that respondents exposed to pre-election poll results placed at the beginning of the story, given their prominence in the news story, would exhibit a larger affect on vote choice and certainty of vote choice than respondents exposed to poll results placed at the end of the story.

The third hypothesis there to be an interaction effect between the placement in the story and the reported spread between the candidates on vote choice change and certainty of vote choice. Therefore, the strongest effect was expected from the story featuring the 68% Stewart versus 32% Johnson spread placed at the beginning of the news story and the weakest effect from the 49% Stewart versus 47% Johnson spread positioned at the end of the story.
Attitudes toward pre-election polls, including perception of accuracy and usefulness, were also expected to be factors in explaining the effects of exposure to the poll results. Respondents who deemed polls as being accurate and useful and who reported having used polls to help them make decisions about whom to vote for were expected to show more pronounced shifts in vote choice and certainty of vote choice than respondents who deemed polls as inaccurate and harmful to our political process.

3.3 Study Respondents

Data were collected by conducting experimental sessions with undergraduate students as respondents during the summer of 2001. The availability of undergraduate students to participate was negotiated with four professors and/or teaching assistants at two departments at the Ohio State University. A total of 282 students participated in the experimental sessions, which yielded about 35 students per experimental condition.

3.3.1 Demographic Characteristics of Respondents: Gender and Political Identifiers

The participants in the experimental sessions were 282 undergraduate students at the Ohio State University who - at the time of data collection - were enrolled in upper-level undergraduate courses in the Department of Political Science and the School of Communication (formerly known as the School of Journalism and Communication).
Table 3.2: Gender, political party identification and political ideology of participants.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>51</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
</tr>
</tbody>
</table>

**Party Identification**

<table>
<thead>
<tr>
<th>Party Identification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrat</td>
<td>32</td>
</tr>
<tr>
<td>Republican</td>
<td>35</td>
</tr>
<tr>
<td>Independent</td>
<td>22</td>
</tr>
</tbody>
</table>

**Political Ideology**

<table>
<thead>
<tr>
<th>Political Ideology</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal</td>
<td>32</td>
</tr>
<tr>
<td>Moderate or middle of the road</td>
<td>48</td>
</tr>
<tr>
<td>Conservative</td>
<td>20</td>
</tr>
</tbody>
</table>

As shown on Table 3.2, respondents were almost evenly divided among males and females, with 137 (51 percent) males and 144 (49 percent) females. One respondent did not provide an answer for gender.

In terms of party identification and political ideology, respondents in this study did not reflect the general population voting population as measured by the 2002 National Election Study. Respondents in this study were less likely to attach themselves to a political party and to label themselves as liberal or conservative than the general population.

Thirty-two percent of respondents classified themselves as Democrats, 35 percent as Republican, and 22 percent as Independent. In contrast, the 2002 National Election
Survey reports party identification for adults in the country as 49 percent Democrat, 43 percent Republican, and 8 percent Independent.

In terms of political ideology, 32 percent considered themselves as liberal, 48 percent as middle of the road, and 20 percent as conservative. The 2002 NES reported that 23 percent of adults in the country classify themselves as liberals, 22 percent as moderate/middle of the road, and 35 percent as conservative.

Twenty-six percent of respondents reporting not voting on the 2000 presidential election. Since the experimental sessions were conducted in higher-level courses, it can be inferred that a number of students who did not vote on the 2000 presidential election were eligible to vote (18 and older) but chose not to do it.

Among the respondents who voted on the 2000 presidential election, 36 percent voted for Al Gore, 32 percent voted for George W. Bush, and six percent voted for Ralph Nader. Four students did not answer the question.

The threats of maturation and mortality were minimized by the brief nature of the experimental sessions. Performing all the tasks required in the experiment took approximately 20 minutes. These tasks included:

1. Reading the first story about the fictitious race.
2. Answering a self-administered questionnaire to measure pre-test attitudes.
3. Reading a second story that included poll results placed either at the beginning or at the end of the story.
4. Answering a post-test self-administered questionnaire to measure any changes in their attitudes after exposure to the stimulus and other independent variables.
5. Answering recall questions about the pre-election poll featured in the story.

The most important characteristic of true experimental designs is the randomized assignment of respondents to the control and the experimental group (Campbell and Stanley, 1963). The purpose of this randomization is to obtain a control group that is as similar to the experimental group as possible. Hence, the validity of this experimental design hinged upon the random assignment (distribution) of the stimuli among the respondents.

To ensure both an equitable distribution of all eight experimental conditions and the random assignment of respondents to a booklet, prior to each experimental session booklets were ordered one through eight and stacked sequentially for distribution to respondents. At the experimental session, booklets were handed out after all respondents were seated, handing one booklet to each student in the order in which they were seated.
<table>
<thead>
<tr>
<th>Spread between candidates</th>
<th># of Respondents per condition</th>
<th>Percent per condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>48% versus 48%</td>
<td>70</td>
<td>24.8</td>
</tr>
<tr>
<td>49% versus 47%</td>
<td>71</td>
<td>25.2</td>
</tr>
<tr>
<td>56% versus 40%</td>
<td>69</td>
<td>24.5</td>
</tr>
<tr>
<td>68% versus 32%</td>
<td>72</td>
<td>25.5</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Position of poll results in story

<table>
<thead>
<tr>
<th>Position of poll results in story</th>
<th># of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>147</td>
<td>52.1</td>
</tr>
<tr>
<td>End</td>
<td>135</td>
<td>47.9</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Distribution of booklets by stimuli combination

<table>
<thead>
<tr>
<th>Distribution of booklets by stimuli combination</th>
<th># of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning 48% versus 48%</td>
<td>35</td>
<td>12.4</td>
</tr>
<tr>
<td>Beginning 49% versus 47%</td>
<td>39</td>
<td>13.8</td>
</tr>
<tr>
<td>Beginning 56% versus 40%</td>
<td>35</td>
<td>12.4</td>
</tr>
<tr>
<td>Beginning 68% versus 32%</td>
<td>38</td>
<td>13.5</td>
</tr>
<tr>
<td>End 48% versus 48%</td>
<td>35</td>
<td>12.4</td>
</tr>
<tr>
<td>End 49% versus 47%</td>
<td>32</td>
<td>11.3</td>
</tr>
<tr>
<td>End 56% versus 40%</td>
<td>34</td>
<td>12.1</td>
</tr>
<tr>
<td>End 68% versus 32%</td>
<td>34</td>
<td>12.1</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3.3: Distribution of test booklets among respondents.
The ordering and distribution of booklets resulted in a random and fairly even distribution of the eight different stimuli among the 282 respondents, as shown on Table 3.3.

3.4 Experimental Session Protocol

The experimental sessions were conducted in classrooms during four class sessions of four different undergraduate courses. Depending on the preference of the professor/instructor of the class, the experimental sessions were conducted at the beginning or at the end of class. Students were alerted by their professors or instructors to the fact that a researcher would be attending their lecture to collect data for a doctoral dissertation.

Upon arrival at each class session, the following introductory steps were taken:

- The researcher introduced herself and the person assisting her in the administration of the test booklets. The assisting person helped distribute the booklets to respondents, helped monitor the experimental session to ensure respondents were following instructions, and helped collect booklets at the end of the sessions.
- The voluntary and confidential nature of participation was explained to respondents.
- Instructions were imparted to the group about the steps involved in data collection, with emphasis on the importance of working on their own, of refraining from talking out loud or amongst themselves, of completing the steps
as they appeared in the booklet, and of doing their best in answering the questions.

- It was explained that the exercise would take between 15 and 20 minutes to complete.
- Anyone who did not wish to participate was asked to notify the researcher as booklets were being distributed to each participant across the classroom.
- Respondents were thanked in advance for their cooperation.

Only one student in all four sessions refused to participate. Booklets were distributed one by one to ensure that the order of the booklets in the stack was preserved at all times.

3.5 Minimizing Threats to Validity

The measures taken to increase internal and external validity for the research design are discussed in the next two sections.

3.5.1 Internal Validity

Having a control group in the study design helped the internal validity of the study by providing a means to control for threats to validity such as history and maturation. History refers to events that might happen during the course of an experiment that might have some impact on the effect of the independent variables on the dependent variables. The fact that each experimental session was carried out in one visit reduced the threat of history by avoiding external events influencing the results such as students discussing the
stories before the post-test measures were administered to them. Additionally, in one-session experiments such as this one, *intra-session history*-incidents such as laughter or extraneous remarks by participants—might also influence the results. As explained above, respondents were instructed to remain silent during the session to avoid remarks and noises that could threaten the validity of the study.

Controlling for extraneous events can also be minimized in the pretest-posttest control group design by means of the control group. Any impact that history might have had on the experimental group would also appear on the control group. The best practice is to test the control and experimental groups simultaneously, as was done in this study, randomly distributing the different treatments in the sessions, therefore making intra-session history common to both groups.

Another threat to internal validity is maturation, which refers to how normal changes in the participants can affect the results. In experiments carried out over long periods of time, participants growing older might be a concern. In short-term experiments, the concern might be with respondents becoming bored, sleepy or tired, all of which might affect their behavior during the experimental session. Maturation is controlled in a true experimental design, such as the one employed in this study, because its effects should be equally exhibited by both the control and the experimental groups.

Experiments can also suffer from mortality. Mortality occurs when participants do not complete the experiment by leaving the middle of a session or failing to show up for subsequent one. The control group also allows the researcher to determine if the difference between the results of the control and the experimental groups can be ascribed
to mortality. The briefness of the experimental sessions minimized the threat of mortality, such as respondents walking out of the sessions because they felt it was taking too long.

Since all respondents were administered the same questionnaire, the threat that variations in the instrumentation could affect the results was eliminated. At the conclusion of each of the experimental sessions, respondents were appropriately briefed about the fictitious nature of the stories and the purpose of the data collection in more detail.

The control group also helped to control for any effects that the actual testing and re-testing might have had on respondents. Testing materials such as questionnaires might make participants more sensitive to the topic of the experiment. If this occurred, we can expect similar effects on the control group.

The control group also helped with the threat posed by instrumentation, which refers to possible changes in the instruments of observation. In the social sciences, this threat stems from different behaviors exhibited by observers, for example, who might be more attentive in earlier sessions than in later ones. Having sessions with both control and experimental groups simultaneously minimized this threat, as did using fixed instruments such as self-administered questionnaires.

3.5.2 External Validity

Campbell and Stanley argued that, while the threats to internal validity can be minimized in a “neat, conclusive way,” dealing with the external validity of an experimental study is another matter. They posited that generalizing the findings of such
a study usually involves relying on the assumption that one knows the relevant laws operating in the phenomena under study. One assumes, for example, that eye color has no effect on how people react to polling news. But one knows, based on previous research, that pre-testing in an experimental session has some effect and, if we had not controlled for it, it would pose problems for our generalization.

One of the threats to external validity is caused by the interaction of selection of participants and the treatment. This refers to the possibility that the findings apply only to the population from which the participants were selected. If college sophomores are recruited, for instance, then the results might only apply to college sophomores in that university. The principal problem with the interaction of selection and treatment is that there might be characteristics particular to that specific population that might interact with the treatment making it more or less powerful. Given the limited available populations that academic researchers in the social sciences have (i.e. college undergraduate students), this is a hard to conquer threat, especially because research has shown that this population differs from the American population of adults in ways that might interact with experimental treatments. This is a trade-off between internal and external validity that the researcher has to come to terms with by considering what is the most important validity for the purpose of the study.

The external validity of the study depended, in part, on how successful the design was in controlling for the effects of circumstances other than the stimuli. The mundane realism of the stories was an important factor in the external validity of the design. By infusing the stories with the kind of information found on similar election campaign
stories in newspapers in addition to the poll results, respondents were allowed to employ both types of information in their decision-making.

The biggest threat to the external validity of the study was the interaction between the selection of the respondents and the treatment. Since recruiting a random sample of adults in the United States to participate in the study was not feasible, we had to rely on a convenience sample of undergraduate students. These students differed from the adult population in ways that might interact with the treatment. A set of measures including political items helped to assess how characteristics specific to this group interact with the treatment.

The main goal of conducting an experiment to test for the existence of bandwagon and underdog effects is try to establish causality at the level of the individual voter, a relationship between being exposed to poll results and changes in voting preference in the direction of the majority or the minority. Another goal is analyzing the individual factors that might contribute to the occurrence of these effects. This experimental design put the most emphasis on achieving internal validity, the most necessary condition for achieving those goals. The external validity of the study was subject to a selection threat that cannot be eliminated but which was certainly helped by the strong internal validity the design provided.
3.6 Internal Review Board Exemption

The study qualified for an exemption from full review and continuing oversight by an Internal Review Board at the Ohio State University because the research design met the following criteria for exemption:

- Participants were not deceived.
- Participants were not subject to discomfort or harassment beyond levels encountered in daily life.
- Disclosure of the participants’ responses outside the research did not place the subjects at risk of criminal or civil liability or were not damaging to the subjects’ financial standing, employability, or reputation.
- No fetuses, pregnant women, human *in vitro* fertilization, or individuals involuntarily confined or detained in penal institutions were subjects of the study.
- The research did not involve surveys, interview procedures, or observation of public behavior with individuals under the age of 18.

A form authorizing the study to proceed without the full Internal Review Board was obtained.

3.7 Data Processing

Once all experimental sessions were conducted, the answers recorded by respondents in the test booklets were entered into an SPSS database for analysis. Data
were checked for consistency and accuracy by using frequencies and randomly selecting cases for verification.

3.8 Independent Variables

The main independent variables are the pre-election poll results and their placement in the news stories. The main hypothesis of the study posited that respondents exposed to the story featuring the wider spread between the two candidates at the beginning of the story would exhibit the largest effect on their vote choice and certainty of vote choice.

Attitude towards public opinion polls and attention to polls in the media were also measured as independent variables.

3.9 Dependent Variables

The dependent variables measured on the questionnaires were vote choice and certainty of vote choice. The respondents’ vote choice between the two candidates was measured by asking respondents what candidate they would vote for, Johnson or Stewart, “if the election were held today.” Subsequently, certainty of candidate choice was measured by asking respondents to provide a percentage of certainty that they would vote for their candidate of choice “if the election were held today.” This measure was taken in both the pre-test and post-test questionnaires.

Using these two separate yet related measures of vote choice and certainty of vote choice, a new dependent variable was created to assess any shifts in the direction of the bandwagon or the underdog as done by Lavrakas and Schenck (1990). Each measure accounted for 100 points on the 400-point scale. Half of the scale score was awarded
based on whether the respondent switched candidates on the post-test questionnaire and the other half was based on the difference between the certainty of vote choice reported on the first measure and that reported on the second measure of certainty. The score ranged from minus two hundred (-200) points to two hundred (200) points. More information on the creation of this dependent variable can be found on Chapter 4.

3.1 Conclusion

As detailed in this chapter, the research design was concerned with maximizing the internal validity of the study. The implementation of the design during the experimental sessions was carried out with the same goal. Experimental sessions were uniformly carried out in classrooms during the first 20 minutes of class. Participants were, for the most part, curious about the purpose of the research and careful monitoring during the sessions showed that the stories were read and the questions answered at a reasonable pace.

The next chapter, Chapter 4, describes the data and presents the results of the statistical analyses performed on the data including frequencies, comparisons of means, ANCOVAs, Chi-square tests, and multiple regression analyses employed to study the impact of the independent variables on the three dependent variables described above.
CHAPTER 4

RESULTS

4.1 Introduction

The main goal of the experimental design was to test the effects of exposure to poll results embedded in newspaper stories on respondents’ candidate preference for county commissioner and on the strength with which they held their candidate preference.

Respondents’ preference of candidate for county commissioner was measured by a self-administered questionnaire immediately after reading the first news story. This story provided background information about the two candidates (see Chapter 3). After choosing a candidate, respondents were asked to state their likelihood of voting for that candidate in terms of a percentage on a scale from zero (0%) to one hundred (100%) percent. A blank line was provided for writing in their answer.

Immediately after completing the first questionnaire, respondents were exposed to the experimental stimuli, which was embedded within a second news story featuring pre-election poll results either at the beginning or at the end of the story. Four different pre-election poll results were featured, ranging from a tie between county commissioner
candidates Chris Stewart and Pat Johnson (48 percent - 48 percent) to a wide lead of candidate Stewart over candidate Johnson (64 percent - 32 percent).

Following exposure to this second news story, respondents were asked again about their choice of candidate and the certainty of their choice, employing the same measures used on the pre-test questionnaire.

4.2 Dependent Variables

The experiment was designed to explore the relationship between exposure to poll results embedded in a fictitious election coverage newspaper story and changes or shifts in respondents’ preference for their original candidate of choice. The dependent variables were conceptualized as the effect of the exposure to poll results embedded in the news stories on the vote choice and on the certainty of vote choice of respondents. This effect was operationalized as (a) the difference in candidate choice and (b) the difference in certainty of choice between the pre-test and post-test measurements. The descriptive statistics for these two dependent variables are presented below.

4.2.1 Candidate Choice Measure

The candidate choice measure asked respondents to select between candidates Pat Johnson and Chris Stewart “if the election were held today.” Pat Johnson appeared listed as the first response option in the candidate choice question in both the pre-test and post-test questionnaires.
4.2.1.1 Descriptive Statistics for Candidate Choice Measure

<table>
<thead>
<tr>
<th>Candidate choice measures</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidate</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Johnson</td>
<td>157</td>
<td>57</td>
</tr>
<tr>
<td>Stewart</td>
<td>119</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1: Pre-test and post-test results for candidate choice measure.

As shown on Table 4.1, on the pre-test measure of vote choice candidate Pat Johnson obtained 57 percent of the vote versus 43 percent obtained by candidate Chris Stewart. Therefore, there was a 13 percent lead of candidate Johnson over candidate Stewart on the pre-test vote choice measure. Candidate Johnson enjoyed a stronger support among respondents before they were expose to pre-election poll results for the county commissioner race. But on the post-test vote choice measure, the fortunes turned and candidate Chris Stewart took the lead if only by two percent (2%) of the vote.
<table>
<thead>
<tr>
<th>Poll spread and position in story</th>
<th>Pat Johnson</th>
<th>Chris Stewart</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Beginning 68-32</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Beginning 56-40</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Beginning 49-47</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Beginning 48-48</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>End 68-32</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>End 56-40</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>End 49-47</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>End 48-48</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.2: Pre-test and post test results for vote choice by experimental condition.

Table 4.2 shows the percentage of respondents in each experimental condition favoring each candidate in the pre-test and post-test measures. The proportion of respondents favoring one candidate over the other in the pre-test measure was fairly evenly distributed among the respondents exposed to each of the eight experimental conditions of poll results. The post-test columns show the increase or decrease in the percentage of respondents who favored each candidate after exposure to the news story.
Table 4.3: Respondents’ switching from one candidate to the other after exposure to poll results in second news story.

<table>
<thead>
<tr>
<th>Candidate switch after exposure</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not switch</td>
<td>233</td>
<td>84.7</td>
</tr>
<tr>
<td>Switched</td>
<td>42</td>
<td>15.3</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.3 summarizes the switching of candidate choice after exposure to the second news story. Table Overall, the results of the candidate choice measure indicate that a small proportion of respondents (15%) changed their candidate preference from pre-test to post-test measures. After exposure to the second news story featuring the experimental stimuli, 42 respondents (15%) switched to the candidate they did not chose on the pre-test measure.
Table 4.4 shows a breakdown of change in candidate choice for the 42 respondents who switched from one candidate to another on the post-test vote choice measure. After exposure to the second news story, of the 42 respondents that switched candidates, 32 respondents went from supporting Pat Johnson to supporting Chris Stewart. Only ten percent (10%) of respondents who switched candidates went from supporting Stewart to supporting Johnson. As noted above, Chris Stewart was always shown as leading in the pre-election poll embedded in the second news story.

4.2.2 Certainty of Vote Choice Measure

Respondents also were asked in the pre-test and post-test questionnaires to use a percentage scale from zero to 100 to rate the certainty of their candidate preference “if
the election were held today.” Both the pre-test and the post-test measures had a minimum score of 0 and a maximum score of 100.

### 4.2.2.1 Descriptive Statistics for Certainty of Vote Choice Measure

<table>
<thead>
<tr>
<th></th>
<th>How certain are you that you would vote for that candidate if the election were held today?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
</tr>
<tr>
<td>Mean</td>
<td>61.6</td>
</tr>
<tr>
<td>Median</td>
<td>60.0</td>
</tr>
<tr>
<td>Mode</td>
<td>50.0</td>
</tr>
<tr>
<td>Percentage 100% certain</td>
<td>8.9</td>
</tr>
<tr>
<td>Percentage 0% certain</td>
<td>4.3</td>
</tr>
<tr>
<td>Percentage 50% certain</td>
<td>30.1</td>
</tr>
<tr>
<td>Percentage under 50% certain</td>
<td>12.1</td>
</tr>
<tr>
<td>Percentage over 50% certain</td>
<td>57.8</td>
</tr>
</tbody>
</table>

Table 4.5: Descriptive statistics for the pre-test and post-test certainty of vote choice measures.

As displayed on Table 4.5, the mean for the pre-test certainty of vote choice measure was 61.6 percent, with a median score of 60, and a mode of 50 percent. This
shows that, prior to exposure, about 88 percent of respondents were at least 50 certain of their vote choice. Only nine percent (9%) of respondents declared themselves as 100 percent sure of their vote choice on the pre-test measure, while 4 percent recorded no certainty at all, or zero percent.

For the post-test vote certainty measure, the mean score was 63.9 percent, the median score 65 percent and the mode 50. Post-test certainty scores show mixed results. Although the mean certainty score increased by 2 percentage points (2%) and the median by 5 percentage points (5%), there was a slight drop in the proportion of respondents who reported being 100 percent (100%) certain of their vote choice and those who were 50 percent (50%) certain. The ranks for those who were over 50 percent (50%) certain showed the largest increase with 4.8 percent (4.8%).

While the percentage of respondents who reported being 100 percent sure of their vote choice decreased slightly after exposure to the experimental stimuli, all other categories displayed on Table 4.5 showed a small shift towards decreased uncertainty. In general, uncertainty was not greatly reduced after exposure to the poll results in the news stories.
### 4.2.2.2 Statistical Tests for Certainty of Vote Choice Means

#### Paired Samples statistics for pre-test and post-test certainty of vote choice

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>61.65</td>
<td>278</td>
<td>26.719</td>
<td>1.602</td>
</tr>
<tr>
<td>Post-test</td>
<td>63.93</td>
<td>278</td>
<td>22.618</td>
<td>1.357</td>
</tr>
</tbody>
</table>

#### Paired Samples Correlations

<table>
<thead>
<tr>
<th>N</th>
<th>Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>278</td>
<td>.722</td>
<td>.000</td>
</tr>
</tbody>
</table>

#### Paired Samples T-Test

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.28</td>
<td>18.774</td>
<td>1.126</td>
<td></td>
<td>-4.50</td>
<td>-.07</td>
<td>-2.029</td>
<td>277</td>
<td>.043</td>
</tr>
</tbody>
</table>

Table 4.6: Results of paired samples T-test for pre-test and post-test certainty of vote choice.

To test whether the differences between the pre-test and post-test certainty scores were statistically significant, a paired-samples T-test was conducted. As shown on Table 4.6, although the means of the certainty scores for the pre-test and the post-test certainty
of vote choice measures did not differ greatly, (61.6 and 63.9 respectively), the paired-samples T-test showed that there is a statistically significant difference between the two scores (p = .043).

Figure 4.1: Means of post-test certainty measures by experimental condition.

Figure 4.1 shows the means for the post-test scores for vote certainty for each of the eight experimental conditions. In general, the mean score for poll results placed at the end of the news story are overall higher than those for poll results placed at the beginning.
<table>
<thead>
<tr>
<th>Experimental condition</th>
<th>Pretest</th>
<th>Post-test</th>
<th>How certain you are that you would vote for this candidate if the election were held today?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning 48-48</td>
<td>Mean</td>
<td>59.17</td>
<td>66.21</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>35.751</td>
<td>25.058</td>
</tr>
<tr>
<td>Beginning 49-47</td>
<td>Mean</td>
<td>54.51</td>
<td>61.18</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>34.684</td>
<td>24.146</td>
</tr>
<tr>
<td>Beginning 56-40</td>
<td>Mean</td>
<td>59.77</td>
<td>58.76</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>25.444</td>
<td>21.702</td>
</tr>
<tr>
<td>Beginning 68-32</td>
<td>Mean</td>
<td>61.66</td>
<td>63.89</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>21.940</td>
<td>21.255</td>
</tr>
<tr>
<td>End 48-48</td>
<td>Mean</td>
<td>65.60</td>
<td>70.63</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>33.627</td>
<td>15.568</td>
</tr>
<tr>
<td>End 49-47</td>
<td>Mean</td>
<td>59.00</td>
<td>60.41</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>24.131</td>
<td>23.386</td>
</tr>
<tr>
<td>End 56-40</td>
<td>Mean</td>
<td>55.79</td>
<td>65.39</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>46.364</td>
<td>25.289</td>
</tr>
<tr>
<td>End 68-32</td>
<td>Mean</td>
<td>62.59</td>
<td>64.94</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>23.517</td>
<td>23.386</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>59.72</td>
<td>63.93</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>282</td>
<td>278</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>31.449</td>
<td>22.618</td>
</tr>
</tbody>
</table>

Table 4.7: Comparison of means for the pre-test and post-test certainty measures by experimental condition.
Table 4.7 shows the means for the pre-test and post test certainty of vote choice measures for respondents in each of the eight experimental conditions. On average, the means for the posttest measures were 4.17 percentage points larger than the means for the pre-test measures. All conditions exhibited an increase in certainty however small, except for the 56% - 40% condition, which showed a decrease of one percentage point between the pre-test and post-test measures. The largest increase was for respondents exposed to the poll results of 56% - 40% placed at the end of the story, there was a jump of almost 10 percentage points between the pre-test and the post-test measures.

The difference between the means for the pre-test and post-test measures was only 4.17 points. This is an indication that respondents’ certainty about their candidate preference was not significantly influenced by the stimulus embedded in the news stories. The analysis of variance that follows will test for a statistically significant relationship between the certainty scores and exposure to the experimental stimuli.
Table 4.8: ANOVA for means of pre-test and post-test certainty of vote choice.

Table 4.8 shows the results of an analysis of variance (ANOVA) for the means of the certainty scores by the eight experimental stimuli. The ANOVA found no significant relationship between the means for the certainty score and exposure to the experimental conditions.

### 4.3 The Effect Dependent Variable

To fully explore the effect of the stimuli on respondents’ candidate choice and certainty of choice, a new dependent variable labeled “effect” was created. The “effect” variable measured changes and shifts in both candidate choice and certainty of choice, as well as the direction in which the shifts or changes occurred. This variable accounted for strong shifts such as a change of candidate of choice with a hundred percent certainty of voting for new candidate, and small shifts such as a respondent keeping his original
candidate but reporting feeling 20 percent less certain that he would vote for him than he originally did.

4.3.1 Calculating the Effect Variable

First, a measure was created to account for respondents’ switching of candidates and shifts in their vote certainty as measured in the pre-test questionnaire. This variable was labeled \( pre \). Pre is a scale ranging from \(-100\) to \(+100\) anchored by certainty of vote for Johnson versus certainty of vote for Stewart. If a respondent’s pre-test vote choice was candidate Pat Johnson (the underdog candidate\(^1\)), the value of \( pre \) was calculated as zero (0) minus certainty of vote choice. For instance, a respondent who chose Johnson on the pre-test vote choice measure and reported a certainty of 30 percent on the pre-test certainty measure received a “pre score” of minus 30 (-30) points. If, on the other hand, a respondent’s pre-test vote choice was Stewart (the bandwagon candidate\(^2\)), the value of \( pre \) was equal to the pre-test certainty reported. For example, a respondent who chose Stewart and was 50 percent certain s/he would vote for him, was awarded a “pre score” of 50. \( pre \) ranged from minus 100 points to 100 (\(-100\) to 100).

A second variable was created to account for switching of candidates and shifts in certainty as measure in the post-test questionnaire. This variable was labeled “post.” The same procedure used to create the Post variable was used to create the Pre variable. Post ranged from minus 100 points to 100 (\(-100\) to 100). Each respondent who provided

---

\(^1\) In the poll results, candidate Pat Johnson was always shown to have the smaller share of the vote. For example, in the 68% versus 32 % condition, Johnson was shown to have the 32%.

\(^2\) In the poll results, candidate Chris Stewart was always shown to have the larger share of the vote. For example, in the 68% versus 32 % condition, candidate Stewart was shown to have the 68%. 

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answers to both vote choice measures and the to two certainty measures received a score for the new Pre and Post variables. The effect variable was then calculated as the post score minus the pre score. The syntax for the creation of all three variables follows:

\[
\text{Compute pre} \\
\text{If (pre-test vote choice = Johnson) pre} = (0-\text{pre-test certainty of vote choice}) \\
\text{If (pre-test vote choice = Stewart) pre} = (\text{pre-test certainty of vote choice}) \\
\text{Compute post} \\
\text{If (post-test vote choice = Johnson) post} = (0-\text{post-test certainty of vote choice}) \\
\text{If (post-test vote choice = Stewart) post} = (\text{post-test certainty of vote choice}) \\
\text{Compute effect} \\
\text{Effect} = \text{post - pre}
\]

To illustrate, a respondent who chose Johnson with a 50 percent certainty after reading the first news story, and who stayed with Johnson on the post test measure but his certainty rose to 85 percent, received a pre score of –50, a post score of –85, and an effect score of –35. The minus sign indicates that there was movement in the direction of the underdog candidate Johnson because this respondent’s certainty towards voting for Johnson increased 30 points after exposure to the experimental stimulus in the second news story.

4.3.2 Descriptive Statistics for the Effect Variable

The effect variable had an observed minimum value of -174 and an observed maximum of 188 within the group of respondents who provided data for both the pre and post measures. The mean value was 10.13, with a median and a mode of zero (0).
The descriptive statistics for the pre, post and effect variables are displayed on Table 4.9. The means for the pre and post variables were almost 10 percentage points apart, with the pre variable mean going in the underdog direction and the post in the bandwagon direction. The mean for the pre (-5.91) variable represent the average support for candidates at the pre-test measure, the negative indicates that respondents supported Johnson more than Stewart at the pre-test measure. The mean for post (3.83) indicates a shift in support towards candidate Stewart. The mean for the effect variable (10.13) represents the average shift in support for the candidates after exposure to the experimental stimuli. Note that the mean for the effect variable is fairly small compared to the maximum and the minimum values. This is the case because 50 percent of respondents did not exhibit change after exposure to the experimental stimuli.
4.3.3 Comparison of Means for the Effect Variable

A comparison of means was conducted to look at the mean shift in the effect variable for the different experimental conditions, including the spread in the poll results and the placement of the poll results in the story.
<table>
<thead>
<tr>
<th>Poll results spread between candidates</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>48-48</td>
<td>10.8806</td>
<td>67</td>
<td>58.14937</td>
</tr>
<tr>
<td>49-47</td>
<td>.0145</td>
<td>69</td>
<td>29.77933</td>
</tr>
<tr>
<td>56-40</td>
<td>19.2836</td>
<td>67</td>
<td>54.46066</td>
</tr>
<tr>
<td>68-32</td>
<td>10.6250</td>
<td>72</td>
<td>45.40815</td>
</tr>
<tr>
<td>Total</td>
<td>10.1345</td>
<td>275</td>
<td>48.26743</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position of the poll results in the story</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>11.1049</td>
<td>143</td>
<td>48.49201</td>
</tr>
<tr>
<td>End</td>
<td>9.0833</td>
<td>132</td>
<td>48.18540</td>
</tr>
<tr>
<td>Total</td>
<td>10.1345</td>
<td>275</td>
<td>48.26743</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position of poll results in story combined with spread between candidates</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning 48-48</td>
<td>16.0909</td>
<td>33</td>
<td>57.69173</td>
</tr>
<tr>
<td>Beginning 49-47</td>
<td>1.1053</td>
<td>38</td>
<td>10.27405</td>
</tr>
<tr>
<td>Beginning 56-40</td>
<td>19.7059</td>
<td>34</td>
<td>59.61113</td>
</tr>
<tr>
<td>Beginning 68-32</td>
<td>9.0789</td>
<td>38</td>
<td>51.71146</td>
</tr>
<tr>
<td>End 48-48</td>
<td>5.8235</td>
<td>34</td>
<td>59.00615</td>
</tr>
<tr>
<td>End 49-47</td>
<td>-1.3226</td>
<td>31</td>
<td>43.31927</td>
</tr>
<tr>
<td>End 56-40</td>
<td>18.8485</td>
<td>33</td>
<td>49.52154</td>
</tr>
<tr>
<td>End 68-32</td>
<td>12.3529</td>
<td>34</td>
<td>37.84408</td>
</tr>
<tr>
<td>Total</td>
<td>10.1345</td>
<td>275</td>
<td>48.26743</td>
</tr>
</tbody>
</table>

Table 4.10: Means of dependent variable effect by spread between candidates, position of poll results in the news story, and the combination of both.
Table 4.10 shows the results of the comparison of means analysis for the four spreads. The means for the effect variable for all eight experimental conditions ranged from 19.70 to -1.33. The 49-47 condition exhibited the lowest mean and the 56-40 condition the highest mean. There is not much difference between the means for the two placement conditions of beginning and end. The effect means for the eight experimental conditions did not follow the expected pattern of the larger the spread between the candidates the higher the mean for effect.

4.4 Analysis of Covariance for Effects of Independent Variables

To test for the interaction of the two independent variables poll spread and position of the poll results in the story, various analyses of covariance were conducted. The results are displayed and discussed in the following pages.

<table>
<thead>
<tr>
<th>Percentage points by which candidate leads</th>
<th>Placement of poll results in the news story</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Mean</td>
<td>Std. Error</td>
</tr>
<tr>
<td>0</td>
<td>1.394</td>
</tr>
<tr>
<td>2</td>
<td>1.447</td>
</tr>
<tr>
<td>14</td>
<td>1.429</td>
</tr>
<tr>
<td>36</td>
<td>1.447</td>
</tr>
</tbody>
</table>

Table 4.11: Means for pre-test candidate preference by percentage points by which candidate leads and position of the poll results in the story as random factors.
Table 4.11 shows the means for the pre-test candidate preferences for each of the four leads featured in the news stories. The means are fairly similar among the eight experimental conditions.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Hypothesis</td>
<td>562.739</td>
<td>1</td>
<td>562.739</td>
<td>83573.401</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>3.286E-04</td>
<td>4.880E-02</td>
<td>6.733E-03</td>
<td></td>
</tr>
<tr>
<td>LEAD1</td>
<td>Hypothesis</td>
<td>.121</td>
<td>3</td>
<td>4.019E-02</td>
<td>1.174</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>.103</td>
<td>3</td>
<td>3.424E-02</td>
<td></td>
</tr>
<tr>
<td>POSITION</td>
<td>Hypothesis</td>
<td>7.830E-04</td>
<td>1</td>
<td>7.830E-04</td>
<td>.023</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>.104</td>
<td>3</td>
<td>3.434E-02</td>
<td></td>
</tr>
<tr>
<td>LEAD1 * POSITION</td>
<td>Hypothesis</td>
<td>.103</td>
<td>3</td>
<td>3.424E-02</td>
<td>.136</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>67.478</td>
<td>268</td>
<td>.252</td>
<td></td>
</tr>
</tbody>
</table>

a 1.000 MS(LEAD1) + MS(POSITION) - 1.000 MS(LEAD1 * POSITION)
b MS(LEAD1 * POSITION)
c 1.000 MS(LEAD1 * POSITION) + 4.476E-04 MS(Error)
d MS(Error)

Table 4.12: ANCOVA results for pre-test candidate preference as dependent variable with poll spread points and position of poll results in story as random factors.

The results of an analysis of covariance (ANCOVA) shown on Table 4.12 with pre-test candidate preference as dependent variable and poll spread points and position of poll results in the story as random factors did not show a statistically significant relationship between these variables. This means that candidate choice for respondents in...
each of the four poll spread conditions was not significantly different from one another before exposure to the poll results in the story.

<table>
<thead>
<tr>
<th>Percentage points by which candidate leads</th>
<th>Placement of poll results in news story</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
<td>End</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Mean 1.513</td>
<td>Std. Error .062</td>
<td>Mean 1.523</td>
</tr>
<tr>
<td>2</td>
<td>Mean 1.437</td>
<td>Std. Error .058</td>
<td>Mean 1.447</td>
</tr>
<tr>
<td>14</td>
<td>Mean 1.582</td>
<td>Std. Error .061</td>
<td>Mean 1.573</td>
</tr>
<tr>
<td>36</td>
<td>Mean 1.490</td>
<td>Std. Error .058</td>
<td>Mean 1.544</td>
</tr>
</tbody>
</table>

*a Evaluated at covariates appeared in the model: Pretest 'If the election were held today, for whom would you vote?' = 1.43.

Table 4.13: Means for post-test candidate preference by percentage points by which candidate leads and position of the poll results in the story as random factors and pre-test candidate preference as covariate.

Table 4.13 shows the means for post-test candidate preference variable when percentage points of lead and position of the poll results in the story were introduced as random factors and pre-test candidate preference was used as covariate. The means were very similar for the eight experimental conditions.
<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Hypothesis</td>
<td>7.038</td>
<td>1</td>
<td>7.038</td>
<td>51.445</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>11.683</td>
<td>85.401</td>
<td>.137</td>
<td></td>
</tr>
<tr>
<td>PRE7</td>
<td>Hypothesis</td>
<td>34.335</td>
<td>1</td>
<td>34.335</td>
<td>269.394</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>33.902</td>
<td>266</td>
<td>.127</td>
<td></td>
</tr>
<tr>
<td>LEAD1</td>
<td>Hypothesis</td>
<td>.625</td>
<td>3</td>
<td>.208</td>
<td>16.286</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>3.834E-02</td>
<td>2.996</td>
<td>1.280E-02</td>
<td></td>
</tr>
<tr>
<td>POSITION</td>
<td>Hypothesis</td>
<td>1.924E-02</td>
<td>1</td>
<td>1.924E-02</td>
<td>1.503</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>3.834E-02</td>
<td>2.996</td>
<td>1.280E-02</td>
<td></td>
</tr>
<tr>
<td>LEAD1 *</td>
<td>POSITION</td>
<td>3.842E-02</td>
<td>3</td>
<td>1.281E-02</td>
<td>.100</td>
</tr>
<tr>
<td></td>
<td>POSITION</td>
<td>33.902</td>
<td>266</td>
<td>.127</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.14: ANCOVA results for post-test candidate preference as dependent variable with poll spread points and position of poll results in story as random factors and pre-test candidate preference as covariate.

An analysis of covariance was run to investigate whether the variance of the pre-test candidate preference was significantly related to the variance on the post-test candidate preference dependent variable when the independent variables poll spread and position of poll were introduced as random factors. The pre-test candidate preference variance was expected to be strongly related to the variance of the post-test candidate preference given that past behavior is usually a good indicator of future behavior.
Table 4.14, showed that, indeed, pre-test candidate preference is a statistically significant covariate of the effect variable \((p. = .000)\), indicating that respondents were very likely to stick with their initial candidate of choice after exposure to the experimental manipulations.

In this analysis, the independent variable lead also showed a statistically significant relationship to the post-test candidate preference dependent variable when entered as a random factor. This result is at odds with the findings of other analyses presented in this chapter that found that the independent variable poll spread did not have a statistically significant effect on vote choice and certainty of vote choice. Entering the independent variables as random factors in this analysis probably contributed to a finding of statistical significance, making the statistic more sensitive in identifying these effects.
<table>
<thead>
<tr>
<th>Percentage points by which candidate leads</th>
<th>Beginning</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>End</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Error</td>
<td>Mean</td>
<td>Std. Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>15.051</td>
<td>8.098</td>
<td>6.050</td>
<td>7.975</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.498</td>
<td>7.544</td>
<td>4.810</td>
<td>8.357</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>19.932</td>
<td>7.975</td>
<td>17.809</td>
<td>8.098</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>9.471</td>
<td>7.544</td>
<td>11.791</td>
<td>7.976</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Evaluated at covariates appeared in the model: Pretest 'If the election were held today, for whom would you vote?' = 1.43.

Table 4.15: Means for effect variable by percentage points by which candidate leads and position of the poll results in the story as random factors and pre-test candidate preference as covariate.

The means for the effect variable by the percentage points by which candidate Stewart leads are displayed on Table 4.15. The means for the control condition of 48-48 and the 56-40 conditions are the largest for the four experimental conditions.
Table 4.16: ANCOVA results for effect as dependent variable with poll spread points and position of poll results in story as random factors and pre-test candidate preference as covariate.

The results of the ANCOVA with effect as dependent variable with poll spread points and position of poll results in the story as random factors and pre-test candidate preference as covariate, displayed on Table 4.16, again showed a statistically significant effect for poll spread (p = .047). Neither the position of the poll results in the story (p = .357) nor the interaction of poll spread and position of the poll results in the story did not show a statistically significant effect on the effect variable (p = .912)
<table>
<thead>
<tr>
<th>Percentage points by which candidate leads</th>
<th>Beginning</th>
<th></th>
<th>End</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Error</td>
<td>Mean</td>
<td>Std. Error</td>
</tr>
<tr>
<td>0</td>
<td>14.640</td>
<td>8.111</td>
<td>5.784</td>
<td>7.982</td>
</tr>
<tr>
<td>2</td>
<td>1.855</td>
<td>7.555</td>
<td>.183</td>
<td>8.360</td>
</tr>
<tr>
<td>14</td>
<td>19.981</td>
<td>7.977</td>
<td>17.940</td>
<td>8.101</td>
</tr>
<tr>
<td>36</td>
<td>9.510</td>
<td>7.546</td>
<td>11.715</td>
<td>7.978</td>
</tr>
</tbody>
</table>

a Evaluated at covariates appeared in the model: Pretest 'How certain you are that you would vote for this candidate if the election were held today?' = 61.96.

Table 4.17: Means for effect variable with position of the poll results in the story and percentage points by which candidate leads as random factors and pre-test candidate preference and certainty of vote choice as covariates.

The means for the effect variable with position of the poll results in the story and percentage points by which candidate leads as random factors and pre-test candidate preference and certainty of vote choice as covariates are shown on Table 4.17.
<table>
<thead>
<tr>
<th>Source</th>
<th>Hypothesis</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>36672.922</td>
<td>1</td>
<td></td>
<td>36672.922</td>
<td>16.106</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>297005.687</td>
<td>130.441</td>
<td></td>
<td>2276.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRE8</td>
<td>1965.213</td>
<td>1</td>
<td></td>
<td>1965.213</td>
<td>.908</td>
<td>.341</td>
</tr>
<tr>
<td>Error</td>
<td>573252.717</td>
<td>265</td>
<td></td>
<td>2163.218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRE7</td>
<td>49757.986</td>
<td>1</td>
<td></td>
<td>49757.986</td>
<td>23.002</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>573252.717</td>
<td>265</td>
<td></td>
<td>2163.218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSITION</td>
<td>459.531</td>
<td>1</td>
<td></td>
<td>459.531</td>
<td>1.269</td>
<td>.342</td>
</tr>
<tr>
<td>Error</td>
<td>1082.622</td>
<td>2.990</td>
<td></td>
<td>362.127</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEAD1</td>
<td>10890.428</td>
<td>3</td>
<td></td>
<td>3630.143</td>
<td>9.925</td>
<td>.044</td>
</tr>
<tr>
<td>Error</td>
<td>1120.098</td>
<td>3.062</td>
<td></td>
<td>365.765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSITION *</td>
<td>1087.951</td>
<td>3</td>
<td></td>
<td>362.650</td>
<td>.168</td>
<td>.918</td>
</tr>
<tr>
<td>LEAD1</td>
<td>573252.717</td>
<td>265</td>
<td></td>
<td>2163.218</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ a \quad 7.256E-02 \text{MS(POSITION)} + 7.270E-02 \text{MS(LEAD1)} - 7.258E-02 \text{MS(POSITION \times LEAD1)} + .927 \text{MS(Error)} \]
\[ b \quad \text{MS(Error)} \]
\[ c \quad 1.000 \text{MS(POSITION \times LEAD1)} - 2.905E-04 \text{MS(Error)} \]
\[ d \quad .998 \text{MS(POSITION \times LEAD1)} + 1.730E-03 \text{MS(Error)} \]

Table 4.18 ANCOVA results for effect as dependent variable with poll spread points and position of poll results in story as random factors and pre-test candidate preference and certainty of vote choice as covariates.

The next analysis was performed with both pre-test candidate preference and pre-test certainty of vote choice as covariates. Pre-test candidate preference had showed statistically significant effects as a covariate on a prior analysis and now certainty of vote choice as a covariate.
choice was included to see if adding it as a covariate would influence the effect of the two dependent variables on the effect variable. Table 4.18 shows that while pre-test candidate choice continued to be a powerful covariate (p = .000) while certainty of vote choice did not reach statistical significance as a covariate in this analysis of covariance.

4.5 Coding the Effect Variable into Bandwagon Effect/No Effect/Underdog Effect

The effect variable was then recoded into a trichotomous variable with three categories labeled underdog effect, no effect, and bandwagon effect. Respondents who showed a negative score on the effect variable were coded into the underdog effect group. Respondents with a positive effect variable score were recoded into the bandwagon group. Respondents with an effect score of zero, meaning no difference between their answers to the pre-test and post-test measures, were coded as “no effect.”

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandwagon effect</td>
<td>87</td>
<td>32</td>
</tr>
<tr>
<td>No effect</td>
<td>138</td>
<td>50</td>
</tr>
<tr>
<td>Underdog effect</td>
<td>50</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>100</td>
</tr>
<tr>
<td>Missing System</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.19: Frequencies for effect variable coded into bandwagon effect, no effect and underdog effect.
Table 4.19 shows a frequency of the effect variable recoded into bandwagon effect, no effect and underdog effect. Thirty-two percent (32%) of respondents exhibited a shift in the direction of the bandwagon candidate, Chris Stewart. Eighteen percent (18%) showed a shift for the underdog, candidate Pat Johnson. Exactly half of the respondents (50%) did not exhibit any difference between their pre-test and post-test measures, yielding an effect score of zero, which classified them as no effect.

4.6 Chi-Square Tests of Independence

Chi-square analyses were conducted to determine whether there was a statistically significant dependent relationship between respondent’s switching candidates on the post-test measure and the three independent variables of poll results spread, position of poll results in the story and those two combined.

Chi-square analyses were also conducted to explore the relationship between the independent variables manipulated in the stimuli and demographic variables such as gender, party identification and political ideology, which were expected to interact with the effect of the stimuli with the dependent variables vote choice, certainty of vote choice and effect (recoded into bandwagon effect/ no effect/underdog effect).

4.6.1 Chi-Square Tests for Vote Choice

The first Chi-square analysis was conducted to ascertain whether there were changes in choice of candidate was related to the independent variables of poll results
spread between candidates, position of the poll results in the story, and those two combined.

<table>
<thead>
<tr>
<th>Spread between candidates</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>68-32</td>
<td>81</td>
<td>19</td>
<td>67</td>
</tr>
<tr>
<td>56-40</td>
<td>82</td>
<td>18</td>
<td>69</td>
</tr>
<tr>
<td>49-47</td>
<td>94</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>48-48</td>
<td>82</td>
<td>18</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>42</td>
<td>275</td>
</tr>
</tbody>
</table>


Table 4.20: Crosstabulation of spread between candidates by percent of respondents that switched from one candidate to the other in post-test vote choice measure.

Table 4.20 shows that the proportion of respondents who switched candidates in each of the experimental spread conditions are not significantly different from one another (p = .091).
Table 4.21: Crosstabulation of position of the poll results in the story by switched from one candidate to the other in post-test measure of vote choice.

<table>
<thead>
<tr>
<th>Position of poll results in story</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>83</td>
<td>17</td>
<td>143</td>
</tr>
<tr>
<td>End</td>
<td>86</td>
<td>14</td>
<td>132</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>42</td>
<td>275</td>
</tr>
</tbody>
</table>

Pearson Chi-square value .525, p = .469

Table 4.21 shows the results a Chi-square test indicating that placement of the poll results in the story did not yield a significantly different number of respondents switching from one candidate to the other (p = .469).
### Table 4.22

<table>
<thead>
<tr>
<th>Position of poll results in story combined with spread</th>
<th>Percent who switched candidates from pre-test to post-test measure of vote choice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Beginning 68-32</td>
<td>26</td>
</tr>
<tr>
<td>Beginning 56-40</td>
<td>21</td>
</tr>
<tr>
<td>Beginning 49-47</td>
<td>0</td>
</tr>
<tr>
<td>Beginning 48-48</td>
<td>21</td>
</tr>
<tr>
<td>End 68-32</td>
<td>12</td>
</tr>
<tr>
<td>End 56-40</td>
<td>15</td>
</tr>
<tr>
<td>End 49-47</td>
<td>13</td>
</tr>
<tr>
<td>End 48-48</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
</tr>
</tbody>
</table>

Pearson Chi-square value 12.540, p = .084

Table 4.22: Crosstabulation of position of poll results in story combined with spread by switched from one candidate to the other in post-test vote choice measure.

Table 4.22 shows that the proportion of respondents who switched candidates in each of the eight experimental conditions did not differ significantly (p = .084). The spread between candidates and the two experimental conditions combined yielded two marginally significant coefficients. Given the small proportion of respondents who switched candidates (15 percent), it is not surprising to see that the tests did not achieve statistical significance at the p<.05 level.
### 4.6.2 Effect Variable Coded as Bandwagon Effect/No Effect/Underdog Effect

The next Chi-square analysis was performed with the effect variable recoded into bandwagon effect/no effect/underdog effect against the independent variables poll results spread between candidates, position of the poll results in the story and the combination of both.

<table>
<thead>
<tr>
<th>Spread between candidates</th>
<th>Underdog effect</th>
<th>No effect</th>
<th>Bandwagon effect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>68-32</td>
<td>18</td>
<td>50</td>
<td>32</td>
<td>67</td>
</tr>
<tr>
<td>56-40</td>
<td>16</td>
<td>56</td>
<td>28</td>
<td>69</td>
</tr>
<tr>
<td>49-47</td>
<td>21</td>
<td>49</td>
<td>30</td>
<td>67</td>
</tr>
<tr>
<td>48-48</td>
<td>18</td>
<td>46</td>
<td>36</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>138</td>
<td>87</td>
<td>275</td>
</tr>
</tbody>
</table>

Pearson Chi-square value 1.474, p = .961.

Table 4.23: Crosstabulation of spread between candidates and movement in the direction of the bandwagon or underdog candidate.

Table 4.23 shows that there is no significant difference between the respondents exposed to each of the experimental spreads exhibiting bandwagon or underdog effects (p = .961).
Table 4.24: Crosstabulation of position of poll results in the story by effect.

<table>
<thead>
<tr>
<th>Position of the poll results in the story</th>
<th>Underdog effect</th>
<th>No effect</th>
<th>Bandwagon effect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>20</td>
<td>48</td>
<td>32</td>
<td>143</td>
</tr>
<tr>
<td>End</td>
<td>17</td>
<td>52</td>
<td>31</td>
<td>132</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>138</td>
<td>87</td>
<td>275</td>
</tr>
</tbody>
</table>

Pearson Chi-square value .568, p = .753.

Table 4.24 shows that the placement of the poll results in the story did not yield a significant difference between respondents’ shifts in the direction of the underdog or the bandwagon (p = .753).
<table>
<thead>
<tr>
<th>Position of poll results in story combined with spread</th>
<th>Bandwagon effect</th>
<th>No effect</th>
<th>Underdog effect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning 68-32</td>
<td>40</td>
<td>42</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>Beginning 56-40</td>
<td>26</td>
<td>50</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>Beginning 49-47</td>
<td>24</td>
<td>55</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>Beginning 48-48</td>
<td>39</td>
<td>46</td>
<td>15</td>
<td>38</td>
</tr>
<tr>
<td>End 68-32</td>
<td>23</td>
<td>59</td>
<td>18</td>
<td>34</td>
</tr>
<tr>
<td>End 56-40</td>
<td>30</td>
<td>61</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>End 49-47</td>
<td>39</td>
<td>42</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>End 48-48</td>
<td>32</td>
<td>47</td>
<td>21</td>
<td>34</td>
</tr>
</tbody>
</table>

Pearson Chi-square value 8.868, $p = .851$.

Table 4.25: Crosstabulation of position of poll results in story combined with spread by effect coded into bandwagon effect/no effect/underdog effect.

As shown on Table 4.25, there was no statistically significant relationship between the independent variables as operationalized in the eight experimental conditions and respondents’ exhibiting effects in the direction of the bandwagon or the underdog candidate ($p = .851$).

4.7 Attention and Attitudes Towards Pre-Election Polls

Attentions and attitudes towards pre-election polls are factors that could influence the effect on poll exposure on vote choice (Hickman, 1991). Questions about respondents’ attention to pre-election polls during the 2000 presidential election and their
attitudes towards pre-election polls in general were included in the post-test questionnaire administered to respondents.

Respondents who reported paying attention to pre-election polls for that election and utilizing these in their decision making process were expected to exhibit a stronger effect of the stimuli in their vote choice and strength of vote choice than respondents who reported not paying attention to polls because familiarity with pre-election polls and previous use of them in election decision-making could make respondents more likely to be influenced by the stimuli.

Questions about attitudes towards polls included whether the respondent considered polls informative, accurate or inaccurate and harmful or helpful to the political process.

Respondents who deemed polls to be helpful and accurate were expected to show a stronger effect on their vote choice and certainty of vote choice than those that characterized polls as harmful and inaccurate because the former’s positive attitudes could lead them to give more weight to the polls in their choice of candidate in the experiment.
### 4.7.1 Attention and Usage of 2000 Pre-Election Polls

<table>
<thead>
<tr>
<th>Did you read or hear about any of the polls predicting who was going to win the 2000 election for president?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>215</td>
<td>81.1</td>
</tr>
<tr>
<td>No</td>
<td>50</td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>100.0</td>
</tr>
</tbody>
</table>

How useful was this type of polling news in helping you decide for which candidate you voted for president?*

<table>
<thead>
<tr>
<th>How useful was this type of polling news in helping you decide for which candidate you voted for president?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely useful</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Quite useful</td>
<td>13</td>
<td>7.1</td>
</tr>
<tr>
<td>Somewhat useful</td>
<td>40</td>
<td>21.9</td>
</tr>
<tr>
<td>Not too useful</td>
<td>53</td>
<td>29.0</td>
</tr>
<tr>
<td>Not at all useful</td>
<td>76</td>
<td>41.5</td>
</tr>
<tr>
<td>Total</td>
<td>183</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Asked only of respondents who reported voting for president in 2000 election and who reported having read or heard about the polls.

Table 4.26: Frequencies for respondents’ exposure and usage of 2000 presidential election pre-election polls.

Table 4.26 shows the frequencies for respondents’ hearing about pre-election polls in the 2000 election and how useful they deemed these to be in deciding whom to vote for president. Among respondents who voted in the 2000 presidential election, only 30 percent deemed pre-election polls at least somewhat useful in helping them determine
which candidate to vote for in that election. Close to 42 percent of respondents who voted found pre-election polls not useful at all in helping them determine whom to vote for. Among all respondents, 76 percent reported hearing or reading about pre-election polls predicting who was going to win the 2000 presidential election.

A majority of respondents (61 percent) deemed polls as harmful to our political process. The accuracy of polls, however, was positively reviewed by respondents, with 82 percent of them considering polls at least somewhat accurate.

<table>
<thead>
<tr>
<th>Did you read or hear about any of the polls predicting who was going to win the 2000 election for president?</th>
<th>Underdog effect</th>
<th>No effect</th>
<th>Bandwagon effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
<td>51</td>
<td>32</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>50</td>
<td>31</td>
</tr>
</tbody>
</table>

Pearson Chi-Square Value .094, p = .954.

Table 4.27: Crosstabulation of reading or hearing about pre-election polls by effect variable coded into bandwagon/no change/underdog.

Respondents who reported having heard or read about polls predicting the 2000 presidential election winner were not significantly more likely than those reporting not having heard about them, as shown on Table 4.27. The percentages across the
bandwagon/underdog/no effect columns are almost identical for both groups, those who reported hearing about polls and those who didn’t.

<table>
<thead>
<tr>
<th>How useful was this type of polling news in helping you decide for which candidate you voted for president?</th>
<th>Underdog effect</th>
<th>No effect</th>
<th>Bandwagon effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful</td>
<td>25</td>
<td>41</td>
<td>34</td>
</tr>
<tr>
<td>Not useful</td>
<td>15</td>
<td>54</td>
<td>31</td>
</tr>
</tbody>
</table>

Pearson Chi-Square Value 4.752, p= .093.

Table 4.28: Crosstabulation how useful polling was in choosing whom to vote for in 2000 election by effect variable coded into bandwagon effect/no effect/underdog effect.

Table 4.28 shows a crosstabulation for a Chi-square analysis for how useful was pre-election polling for respondents who voted in the 2000 presidential election in helping them choose a candidate to vote for. To allow for the analysis, the five categories provided to respondents - extremely useful, quite useful, somewhat useful, not too useful and not at all useful - were collapsed into useful and not useful to meet the minimum number of cases needed in the cells.
4.7.2 Attitudes Towards Pre-Election Polls

<table>
<thead>
<tr>
<th>How accurate do you think pre-election polls are in predicting the outcome of elections?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite accurate</td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td>Somewhat accurate</td>
<td>203</td>
<td>72</td>
</tr>
<tr>
<td>Not too accurate</td>
<td>41</td>
<td>15</td>
</tr>
<tr>
<td>Not at all accurate</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>281</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How informative do you think news stories are about pre-election polls results?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite informative</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>Somewhat informative</td>
<td>171</td>
<td>61</td>
</tr>
<tr>
<td>Not too informative</td>
<td>70</td>
<td>25</td>
</tr>
<tr>
<td>Not at all informative</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>281</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.29: Respondents’ attitudes towards pre-election polls: perceived accuracy and information level.

Table 4.29 shows the frequencies for the questions about attitudes towards pre-election polls. On recalling the results of pre-election polls for the 2000 presidential election, 35 percent or respondents recalled them as being “too close to call.” Sixty
percent of respondents deemed poll results as “harmful” to our political process. Seven respondents did not answer the question.

<table>
<thead>
<tr>
<th>How accurate do you think pre-election polls are in predicting the outcome of elections?</th>
<th>Underdog effect</th>
<th>No effect</th>
<th>Bandwagon effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite accurate</td>
<td>7</td>
<td>74</td>
<td>19</td>
</tr>
<tr>
<td>Somewhat accurate</td>
<td>20</td>
<td>49</td>
<td>31</td>
</tr>
<tr>
<td>Not too accurate</td>
<td>15</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>Not at all accurate</td>
<td>44</td>
<td>44</td>
<td>33</td>
</tr>
</tbody>
</table>

Pearson Chi-Square Value 9.438, p= .15.

Table 4.30: Crosstabulation of perceived accuracy of pre-election polls by effect coded into bandwagon effect/no effect/underdog effect.

Table 4.30 shows the crosstabulation of how accurate respondents believed pre-election polls are in forecasting elections by effect coded into bandwagon effect, no effect and underdog effect. The Chi-square analysis showed that these two variables are statistically independent (p = .15).
Do you think that poll stories are helpful or harmful to our political process? Underdog effect No effect Bandwagon effect

<table>
<thead>
<tr>
<th>Helpful</th>
<th>16</th>
<th>53</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful</td>
<td>19</td>
<td>48</td>
<td>32</td>
</tr>
</tbody>
</table>

Pearson Chi-Square Value .807, p= .668.

Table 4.31 Crosstabulation of perceived helpfulness/harmfulness of pre-election polls by effect coded into bandwagon effect/no effect/underdog effect.

Table 4.32 shows the results of a Chi-square analysis for a respondents’ belief that polls are helpful or harmful to the political process by effect coded into bandwagon effect, no effect and underdog effect. These two variables did not show a statistically significant relationship in this analysis. The table shows that the proportion of respondents in each of the two categories of “helpful” and “harmful” fell almost equally into the underdog/no effect/bandwagon cells, thus yielding a significance level of .668.
Deeming news stories about pre-election polls as informative proved to be the only variable in the attention and attitudes towards pre-election polls group to be significantly related to the effect variable. However, as Table 4.32 shows, respondents who categorized stories as “not too informative” are the ones with the highest percentages in the bandwagon and underdog columns. On the other hand, respondents who deemed stories as “not at all informative” showed the highest percentage in the “no effect” column, which is more in line with the expected pattern for this variable.

<table>
<thead>
<tr>
<th>How informative do you think news stories are about pre-election polls results?</th>
<th>Underdog effect</th>
<th>No effect</th>
<th>Bandwagon effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite informative</td>
<td>16</td>
<td>60</td>
<td>24</td>
</tr>
<tr>
<td>Somewhat informative</td>
<td>18</td>
<td>53</td>
<td>29</td>
</tr>
<tr>
<td>Not too informative</td>
<td>21</td>
<td>33</td>
<td>46</td>
</tr>
<tr>
<td>Not at all informative</td>
<td>13</td>
<td>80</td>
<td>7</td>
</tr>
</tbody>
</table>

Pearson Chi-Square Value 16.232, p= .00.

Table 4.32: Crosstabulation of perceived information of pre-election poll stories by effect coded into bandwagon effect/no effect/underdog effect.
4.8 Multiple Regression Analyses

A multiple regression analysis was conducted to determine what factors were more likely to affect participants’ choice of candidate and the strength with which they held their choice. The dependent variable used in the multiple regressions described below was the “effect” variable.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Party Identification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Democrat</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>91</td>
<td>32.3</td>
<td>32.7</td>
</tr>
<tr>
<td>No</td>
<td>187</td>
<td>66.3</td>
<td>67.3</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>98.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing System</td>
<td>4</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>Republican</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>96</td>
<td>34.0</td>
<td>34.0</td>
</tr>
<tr>
<td>No</td>
<td>186</td>
<td>66.0</td>
<td>66.0</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Political Ideology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liberal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>84</td>
<td>29.8</td>
<td>29.8</td>
</tr>
<tr>
<td>No</td>
<td>198</td>
<td>70.2</td>
<td>70.2</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Conservative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>52</td>
<td>18.4</td>
<td>18.4</td>
</tr>
<tr>
<td>No</td>
<td>230</td>
<td>81.6</td>
<td>81.6</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.33: Frequencies for recoding of political party identification and political ideology into dummy variables for the multiple regression analyses.
The independent variables political party identification and political ideology were recoded into dummy variables for their use as predictor (independent) variables in the regression analyses. Table 4-18 displays the frequencies for the categories in these recoded variables. An almost equal proportion of respondents were classified as “Yes” for Republican as were for “Yes” for Democrat. In political ideology, almost twice as many respondents were classified as liberal than as conservative.

The two independent variables operationalized and manipulated in the experimental stimulus were poll spread between the candidates and position of the poll results in the story. Poll spread between the candidates was recoded into the point spread difference between the candidates in each experimental condition as follows:

- 48-48 spread was recoded into zero (0),
- 47-49 spread was recoded into 2,
- 56-40 spread was recoded into 16 and
- 68-32 spread was recoded into 36.

The variable position of the poll results in the story was coded as 1 for results place at the beginning of the story and 2 for results placed at the end of the story. These two independent variables were entered into the multiple regression model by themselves with the purpose of exploring their effect on the dependent variable by themselves and as a group.
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>8.460</td>
<td>11.307</td>
<td>.748</td>
<td>.455</td>
</tr>
<tr>
<td>Position of poll results in</td>
<td>-1.965</td>
<td>5.841</td>
<td>-.020</td>
<td>-.336</td>
</tr>
<tr>
<td>story</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spread between candidates</td>
<td>1.816</td>
<td>2.599</td>
<td>.042</td>
<td>.699</td>
</tr>
</tbody>
</table>

Table 4.34: Multiple Regression with position of poll results in story and spread between candidates as predictors of change on the dependent variable effect.

Table 4.34 summarizes the results of the multiple regression. The results indicate that neither the spread between the candidates (beta = -.020, p = .737) nor the position of the poll results in the story (beta = p = .485) had a significant effect on the dependent variable effect. The analysis of variance (ANOVA) showed that the model is not statistically significant (p = .304). An R-squared of .002 indicated that the model explain virtually none of the variance of the dependent variable.

Based on the literature and on the results of the preliminary chi-square analyses, various demographic variables were added to the regression model. Political ideology and party identification were recoded into dichotomous dummy variables to enter into the multiple regression model.
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.961</td>
<td>15.240</td>
<td>.194</td>
<td>.846</td>
</tr>
<tr>
<td>Position of poll results in story</td>
<td>-3.010</td>
<td>5.885</td>
<td>-.031</td>
<td>-.511</td>
</tr>
<tr>
<td>Spread between candidates</td>
<td>2.794</td>
<td>2.646</td>
<td>.065</td>
<td>1.056</td>
</tr>
<tr>
<td>What is your gender?</td>
<td>6.921</td>
<td>5.974</td>
<td>.072</td>
<td>1.159</td>
</tr>
<tr>
<td>Democrat Yes or No</td>
<td>1.791</td>
<td>7.540</td>
<td>.017</td>
<td>.238</td>
</tr>
<tr>
<td>Republican Yes or No</td>
<td>-18.448</td>
<td>8.381</td>
<td>-.180</td>
<td>2.201</td>
</tr>
<tr>
<td>Liberal Yes or No</td>
<td>-5.935</td>
<td>7.316</td>
<td>-.056</td>
<td>-.811</td>
</tr>
<tr>
<td>Conservative Yes or No</td>
<td>9.842</td>
<td>9.213</td>
<td>.079</td>
<td>1.068</td>
</tr>
</tbody>
</table>

Table 4.35: Multiple Regression with position of poll results in story and poll result spread between candidates, party identification, political ideology and gender as predictors of change on the dependent variable effect.

Table 4.35 displays the results of the multiple regression including the stimuli independent variable and the demographic variables of political party identification, political ideology and gender. Results showed that a political party identification of Republican is the only variable that makes a statistically significant contribution to prediction of the variance of the effect variable (beta = -.180, p = .029). The beta coefficient for the Republican dummy variable is negative, which means that, when all
other variables are held constant, Republican respondents’ effect scores would be an average of 18.45 lower than for those who did not classify themselves as Republicans. Being a Democrat, on the other hand, was not a statistically significant predictor of change in the effect variable (beta = .017, p = .812). Neither gender nor political ideology showed a statistically significant effect on the dependent variable in this regression model.

Overall, the model explained only three percent of the variance on the effect variable. The analysis of variance showed that the regression model is not statistically significant (p = .738).

A third multiple regression model was utilized to investigate whether attitudes towards pre-election polls are predictors of participants’ vote and certainty of vote. The two stimulus independent variables, spread between candidates and position of poll results in the story, were also included in this regression model, as were gender, political party identification and political ideology.
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-12.077</td>
<td>24.985</td>
<td>-.483</td>
<td>.629</td>
</tr>
<tr>
<td>Position of poll results in story</td>
<td>-3.438</td>
<td>5.932</td>
<td>-.036</td>
<td>-.580</td>
</tr>
<tr>
<td>Spread between candidates</td>
<td>2.971</td>
<td>2.671</td>
<td>.069</td>
<td>1.112</td>
</tr>
<tr>
<td>What is your gender?</td>
<td>7.535</td>
<td>6.045</td>
<td>.078</td>
<td>1.247</td>
</tr>
<tr>
<td>Dummy Democrat</td>
<td>2.208</td>
<td>7.570</td>
<td>.021</td>
<td>.292</td>
</tr>
<tr>
<td>Dummy Republican</td>
<td>-17.729</td>
<td>8.473</td>
<td>-.173</td>
<td>-2.092</td>
</tr>
<tr>
<td>Dummy Liberal</td>
<td>-5.860</td>
<td>7.470</td>
<td>-.056</td>
<td>-.784</td>
</tr>
<tr>
<td>Dummy Conservative</td>
<td>9.929</td>
<td>9.257</td>
<td>.080</td>
<td>1.073</td>
</tr>
<tr>
<td>How accurate do you think pre-election polls are in predicting the outcome of elections? How useful was this type of polling news in helping you decide for which candidate you voted for president? Do you think that poll stories are helpful or harmful to our political process? Did you read or hear about any of the polls predicting who was going to win the 2000 election for president?</td>
<td>8.181</td>
<td>5.129</td>
<td>.101</td>
<td>1.595</td>
</tr>
</tbody>
</table>

Table 4.36: Multiple regression with position of poll results in story, spread between candidates, attention to polls and attitudes towards polls, party identification, political ideology and gender as predictors of change on the dependent variable effect.
As Table 4.36 shows, of all the pre-election polls attitude and usage measure, only perceived accuracy of pre-election polls approached statistical significance as a predictor of changes in vote choice and certainty of vote choice combined into the effect variable (beta = -.101, p = .112). This means that those participants who reported that polls were not accurate were somewhat less likely to exhibit change in their vote choice or the certainty of their vote choice but again, this only approached statistical significance in this model.

4.9 Conclusion

In summary, results showed that the experimental stimuli independent variables of spread in poll results and position of the poll results in the news story did not predict changes in candidate choice or shifts in certainty of candidate choice. These findings did not support the hypotheses that the width of the spread in poll results and the placement of the poll results in the story would serve as predictors of respondents changing their vote to the bandwagon or the underdog candidate or that these variables would affect their certainty that they would vote for their candidate of choice.

The next chapter includes a summary of the findings, conclusions about the study and future research directions.
CHAPTER 5

CONCLUSIONS

5.1 Introduction

“The banning and/or undue obstruction of public opinion research violates too many rights. Restrictions on polls prohibit the best possible study of what from the earliest times of democracy was perceived as a core phenomenon of a liberal society - public opinion. And those restrictions also violate the pollsters’ right to conduct research, the right of the press to publish opinion poll results, the people’s right to information, and last but not least, the public’s right to let its voice be heard.”

Kathleen A. Frankovic
President, World Association of Public Opinion Research (WAPOR)

Who’s afraid of election polls? According to the European Society for Opinion and Marketing Research (ESOMAR), of 78 European countries surveyed in 2002, 30 had enacted restrictions on the publication of pre-election polls. Countries such as France, Italy and Canada have imposed bans disallowing the publication of poll results during a specific period just prior to the election.

In 2001, the European Society for Opinion and Marketing Research (ESOMAR) published a statement titled “Who’s Afraid of Election Polls?” The statement, produced
after a review of the literature, akin to that presented in Chapter 2, concludes that the results are inconclusive and that not enough evidence exists in which to base a ban on the publication of pre-election polls in an election.

This statement was prepared to abate some of the controversy surrounding the publication of polls. Both ESOMAR and the World Association for Public Opinion Research (WAPOR) characterized it as a significant contribution to their attempts to “continue to advocate the freedom to conduct opinion and market research for the benefit of society” (foreword from ESOMAR).

Theses efforts to survey the status of legislation on pre-election polls publishing bans highlights the importance of research on the effects that polls can have on peoples’ choices during democratic election campaigns. According to Kathleen Frankovic (see quote above), the enactment of such bans violates the rights of many, yet the fears leading up to them are not based on conclusive evidence of their effects because there is no such evidence to this day.

The measurement of bandwagon and underdog effects is a challenging endeavor, as Traugott (1992) and others have expressed, yet one worthy of its undertaking because of its political implications. Periodic critical reviews of the literature are important to keep tabs on developments that may sway consensus among public opinion researchers and practitioners in favor or against the occurrence of these effects on real elections. New research designs approaching the phenomena from different perspectives contribute to reaching this consensus and to keep the debate alive. The research presented here hopes to contribute to this debate.
5.2 Summary of Findings

The main goal of this research study was to study the occurrence of bandwagon and underdog effects in a minimal-information low-involvement fictitious election. The research design guiding this study was chosen because past research suggested that bandwagon and underdog effects were more likely to found in conditions such as minimal information and low-involvement election scenarios (Hickman, 1991; Mutz 1998) such as the county commissioner race featured in the news stories.

By providing various levels of leads and two placements of the poll results in the story, using a 2 x 4 factorial design, the study also attempted to measure how these factors would affect candidate choices and certainty of choices among “voters” (i.e., the respondents).

By eliminating party identification, political ideology and character information, factors that according to Hickman (1991), are considered by voters who do not use candidate viability as a cue in their voting decisions, the poll results were expected to be weighed more heavily by respondents. The other types of information about the candidates were purposely written so as to not offer enough facts to differentiate one candidate from the other. Thus, the only real difference between the two candidates was in the results of the poll.

Of the 282 respondents who participated in the experimental sessions, approximately 50 percent (50%) did not show any movement in the direction of the bandwagon or the underdog. Their vote choice and the certainty that they would vote for their chosen candidate essentially was unaffected by exposure to the poll results.
The majority of the 50 percent of respondents who exhibited shifts in their choice of candidate and/or their certainty of vote choice shifted towards candidate Chris Stewart, who was always shown as the leading candidate in the polls.

However, the shifts did not occur as hypothesized. It was expected that those respondents exposed to the largest poll spread between the candidates would show the largest shifts in their candidate preference by either supporting Stewart more because of his likelihood of winning or supporting Johnson more to help him shed his underdog position. Instead, the shifts did not follow a clear pattern, with even the control condition, which had candidates in a statistical tie, sometimes showing larger shifts than the experimental conditions.

The results of the various statistical analyses conducted, including Chi-square, multiple regression, and ANCOVA did not support the hypotheses that respondents exposed to the larger spread between candidates featured at the beginning of the news story would exhibit the larger shifts in their candidate choice and the certainty of their vote choice.

Measures of attention and attitudes towards polls were included to test for the interaction of these variables with the effect of the poll results on respondents’ choices given Hickman’s assumption that poll results would have greater effects on respondents who trust polls. In general, it was found that attention and attitudes towards polls were not significantly related to respondents’ shifting their candidate choice and/or certainty of candidate choice. Only how informative stories featuring pre-election polls results
yielded a statistically significant Chi-square value, yet the direction of the effect was not as expected.

These results are perplexing given the careful construction of the experimental stimuli and the news stories. The stories were carefully written to provide respondents an introduction to the candidates without giving them cues that could be used in their decision-making other than the poll results.

Many explanations come to mind when trying to understand these findings. The fact that half of respondents did not exhibit shifts in either direction may mean that respondents were not engaged enough by the race and therefore did not utilize the cues provided by the polls when making their choices, opting to stick with their original candidate.

Given that the research design incorporated many of the factors that have been identified as determining factors in the influence of polls on people’s voting choices, and given the findings rejecting the hypotheses, this research now joins the literature that is still divided on whether such effects exist.

These results indicate that, if under these most fertile circumstances for the occurrence of these effects, they did not occur as expected, then it bodes well for the effects not occurring under less ideal conditions such as high-involvement elections where other factors such as party identification and political ideology are readily available as cues for voters.
5.3 Limitations of the Study

Had the resources been available, it would have been worthwhile to conduct experimental sessions with a non-college student sample to see if the findings would be replicated. The fact that only college students participated in the sessions will always leave the door open to the possibility of different results from a different type of sample. Nonetheless, the college students proved adept respondents for the scope of this study since the research design was most concerned with internal validity (see Chapter 3).

Dozens of research designs have been employed in an attempt to investigate the occurrence of bandwagon and underdog effects (see Chapter 2). Campbell (1968) designed what Traugott calls “the most complete and fully elaborated design for a bandwagon study” (p. 138). This experiment required the measurement, manipulation and control of precinct, state and national level opinion in determined geographical areas. A four-wave panel study consisting of over 38,400 interviews with 200 respondents per each of the 72 precincts. This study was never conducted because of the amount of funding it would require, approximately $500,000 (Traugott, 1992).

Traugott maintained that although there is sound theory to justify the existence of bandwagon and underdog effects, a conclusive demonstration of these is not likely to emerge because of the “conceptual difficulties” it poses and the high costs undertaking a study such as the one described above would entail. Panel designs, he argued, would have to be utilized by both experimental and survey studies (p. 140).

Ideally, Campbell’s study design above or a similar one in the form of a panel experimental design would be an ideal way to further research into the existence of
bandwagon and underdog effects. A panel design was not chosen for this study because the fictitious nature of the county commissioner race and the contrived stories would not have held up for a two-session design since respondents would have figured out the race was not real and, therefore, participation on the second session would have been compromised.

5.4 Future Research

If conducting this type of research again, using a reference group that might be more relevant to participants is recommended. Although the students who participated were -at the time- residing in the county where the fictitious County Commissioner election portrayed in the news stories was to take place, perhaps they did not relate so well to an election so far removed to their daily lives. Having a more immediate election, such as student council, may have produced different results.

As Mutz (1998) stated, focusing the research into other possible effects of exposure to poll results would be recommended. For instance, possible dependent variables would include participants’ willingness to:

- contribute money to a campaign,
- go out and vote on election day,
- volunteer for a campaign and
- display their support for a candidate via wearing buttons or bumper stickers on their cars.
Given how these factors play a role in the dynamics of electoral campaigns, they are worthy of study as much as the possibility of bandwagon and underdog effects on vote choice.

5.5 Conclusion

This study attempted to add to the literature of bandwagon and underdog effects by conducting an exhaustive review of the literature and carrying out a research design conceived with the factors most likely to determine the occurrence of bandwagon and underdog effects, now joins the inconclusive evidence on bandwagon and underdog effects.

These effects will continue to be studied as long as they continue to be put forth as reasons why bans on pre-election polling and dissemination of poll results are imposed. According to ESOMAR’s 2003 survey of nations about their pre-election polling laws, some nations including Italy, Venezuela and Poland, are loosening up their embargoes by reducing the number of days before an election during which polls can be conducted and published. On the other hand, Greece, the Republic of Korea and Switzerland, among others, have increased their embargoes over the past 6 years.

Hopefully, such developments will encourage institutions with resources to continue to investigate bandwagon and underdog effects as well as other effects that the publishing of pre-election polls by the media may have, including effects on turnout and exit polling effects. Legislation suppressing the dissemination of information that can be used by participants in democratic elections should not be based on conclusions drawn from insufficient evidence but on the careful study of the phenomena that while elusive,
has proven to be of pivotal importance for the freedom of information in many countries around the world.
BIBLIOGRAPHY


APPENDIX A

INTRODUCTORY NEWS STORY ADMINISTERED TO ALL RESPONDENTS BEFORE THE PRE-TEST QUESTIONNAIRE
County Commissioner race begins

- In this issue, The Columbus Times features the two candidates for the Franklin County Commissioner Office.

by Sarah Lewis
Times Staff Reporter

COLUMBUS (VA) - The Office of Franklin County Commissioner has two contenders eager for an opportunity to serve their county: Patrick Johnson and Christopher Stewart.

Running for the office of County Commissioner is Patrick Johnson, who is seeking his first term in elected office. The 47-year-old has always harbored a desire to "give back to the community" where he has spent past two decades with his wife of 26 years, Mary Johnson, and his two children.

Johnson has degrees in Engineering from Miami University and a Master's degree in Physics from Ohio University. Johnson has been employed by a major electrical company for the past ten years. In his community, Johnson supports county-wide testing for schools and favors a process that would give schools more of a say in selecting testing instruments and procedures. He also is a proponent of better urban planning to "help Columbus avoid the nightmarish traffic problems that other big cities in the country suffer."

Also running for the office of County Commissioner is Christopher Stewart. A resident of Columbus for all 42 years of his life, Stewart has raised three daughters who have attended Columbus public schools.

"The best way for me to experience what our school is about is to be a part of them through my children's education," he said.

Married for 21 years to Julie Stewart, director for operations of a local hospital, Chris Stewart works for a local medical research company. He has a Bachelor's degree in Biology from Miami University and a Master's degree in Biology from Bowling Green State University.

His involvement with public interest matters started with volunteering at his daughters' high school where he says he first realized his "energy would be better spent serving a greater constituency of people." He also serves as Treasurer for the Franklin County Conservation Alliance, which reflects his great interest in environmental matters. His vision is "to make the community a safer place for our children to grow."

The election for County Commissioner is important for the county. Besides having limited legislative powers, the Commissioner serves as the manager and administrator of County government, names citizens to boards, commissions and authorities, and awards contracts. One County Commissioner is elected every four years to carry out those functions. The commissioner may be re-elected to a second term.
APPENDIX B

PRE-TEST QUESTIONNAIRE
Please read the following questions carefully and choose the answer that best matches your opinion. (Please do not refer to the story as you are answering the questions).

1. Do you think Pat Johnson’s background is relevant to the position of County Commissioner?
   - Yes
   - No

2. Do you think Chris Stewart’s background is relevant to the position of County Commissioner?
   - Yes
   - No

3. Do you have confidence in Pat Johnson’s ability to deal with the issues of Franklin county’s residents?
   - Yes
   - No

4. Do you have confidence in Chris Stewart’s ability to deal with the issues of Franklin county’s residents?
   - Yes
   - No

5. Is your opinion of Pat Johnson favorable or unfavorable?
   - Favorable
   - Unfavorable

6. Is your opinion of Chris Stewart favorable or unfavorable?
   - Favorable
   - Unfavorable
7. If the election were held today, for whom would you vote?

☐ Pat Johnson
☐ Chris Stewart

8. On a scale of 0 to 100 where 0 means not certain at all, 50 means there's a 50-50 chance you would, and 100 means extremely certain, please indicate how certain you are that you would vote for this candidate if the election were held today. Please write number below: __________________ %

Following are some questions about yourself. Please choose the answer that best describes you.

9. When it comes to politics, some people think of themselves as liberal, and others think of themselves as conservative. How would you describe yourself—are you...

☐ Liberal
☐ Moderate or middle of road
☐ Conservative
☐ Don't know or uncertain

10. Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?

☐ Democrat
☐ Republican
☐ Independent
☐ Other (please specify) __________________________
☐ Don't know or uncertain

11. What is your gender?

☐ Female
☐ Male
APPENDIX C

NEWS STORIES WITH EXPERIMENTAL STIMULI
Candidates take it to the town

Candidates gear up for the uphill battle to win the County Commissioner's seat.

by Sarah Lewis
Times Staff Reporter

COLUMBUS (VIN): The race for Franklin County Commissioner is gearing up for the most intensive campaigning of the race. With only a few weeks to go, candidates Chris Stewart and Pat Johnson are getting to the heart of the matter in visits to various locations throughout the county.

Stewart made it downtown where he met with officials from the Police Department to discuss matters related to crime in Franklin County. He then had lunch with representatives from the city's planning office to discuss issues involving urban sprawl, transportation and safety.

"We have had very constructive discussions that I'm sure have planted the seeds for future developments in these matters," Stewart said.

Meanwhile, Johnson visited the Children's Hospital on Friday where he was greeted with great interest and lots of questions from staff as well as parents who were accompanying their children. The issue of education in the county's public schools dominated the discussion.

"I will look out for the best interests of my children and your children. Education is only one of the matters that we need to attend to. It's only the beginning," Johnson said.

Both candidates are busy getting the word out on their qualifications and their desire to serve their county. Their efforts have not gone ignored by Franklin County residents.

A poll released yesterday shows that, if the election were held today, 48 percent of registered voters in Franklin County would vote for Chris Stewart and 48 percent would vote for Pat Johnson. Four percent of registered voters reported being undecided as to whom they would vote for. The poll also showed that most Franklin County adult residents are following the campaign for County Commissioner.

The poll, conducted over a period of a week, interviewed 805 randomly sampled registered voters in Franklin County. It had a margin of error of 3 percent and a response rate of 70 percent. The poll was subject to other survey errors that might have minimally affected the results, such as interviewer error.
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APPENDIX D

POST-TEST QUESTIONNAIRE
Please read the following questions carefully and choose the answer that best matches your opinion.

1. Do you think Pat Johnson’s background is relevant to the position of County Commissioner?
   - Yes
   - No

2. Do you think Chris Stewart’s background is relevant to the position of County Commissioner?
   - Yes
   - No

3. Do you have confidence in Pat Johnson’s ability to deal with the issues of Franklin county’s residents?
   - Yes
   - No

4. Do you have confidence in Chris Stewart’s ability to deal with the issues of Franklin county’s residents?
   - Yes
   - No

5. Is your opinion of Pat Johnson favorable or unfavorable?
   - Favorable
   - Unfavorable

6. Is your opinion of Chris Stewart favorable or unfavorable?
   - Favorable
   - Unfavorable
7. If the election were held today, for whom would you vote?

☐ Pat Johnson
☐ Chris Stewart

8. On a scale of 0 to 100 where 0 means not certain at all, 50 means there’s a 50-50 chance you would, and 100 means extremely certain, please indicate how certain you are that you would vote for this candidate if the election were held today. Write number on field below:

_____________%

9. How accurate do you think pre-election polls are in predicting the outcome of elections?

☐ quite accurate
☐ somewhat accurate
☐ not too accurate
☐ not at all accurate

10. How informative do you think news stories are about pre-election polls results?

☐ quite informative
☐ somewhat informative
☐ not too informative
☐ not at all informative

11. For whom did you vote in the 2000 presidential election?

☐ Al Gore
☐ George W. Bush
☐ Ralph Nader
☐ Did not vote

12. Did you read or hear about any of the pre-election polls that were predicting who was going to win the 2000 election for president?

☐ Yes
☐ No (please skip to question 15)
☐ Uncertain

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