Individual Resistance to Change

Jeffrey C. Sandusky

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INDIVIDUAL RESISTANCE TO CHANGE

THESIS

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AFIT/GIR/ENV/12-S01

DEPARTMENT OF THE AIR FORCE
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Wright-Patterson Air Force Base, Ohio

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INDIVIDUAL RESISTANCE TO CHANGE

THESIS

Presented to the Faculty
Department of Systems and Engineering Management
Graduate School of Engineering and Management
Air Force Institute of Technology
Air University
Air Education and Training Command
In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Information Resource Management

Jeffrey C. Sandusky, BS
Master Sergeant, USAF

September 2012

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INDIVIDUAL RESISTANCE TO CHANGE

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Abstract

This thesis examines individual resistance to change and concludes that it is a constantly evolving process with many contributing factors. Defining resistance to change is a challenge within its own right. To account for the actions involved in change resistance is an even more complex undertaking. In this research, resistance to change is examined and explained using the influences of goals, participation, leadership effectiveness, and communication. These factors are expressed as the composition of what makes an individual resist or accept change. Each of the four elements of resistance to change are examined independently and then synthesized into a model.
Acknowledgments

As I come to the end of my academic journey here at AFIT I have countless people who have contributed to my successes here both as a student and as a man. First, I would like to thank the United States Air Force for allowing me the opportunity to further my education through this highly selective and extremely challenging endeavor. To my committee and the rest of the faculty and staff a huge debt of gratitude is owed. The things I disliked learning the most seemed to have created all the difference in my education. Without the patience and professionalism of all of the AFIT team there is no was success would have been attained. To my fellow students, your attitudes and friendship made every challenge seem as though it might just be possible. You are the true heart of AFIT, and the reason that we represent the future of the greatest fighting force on earth.

In the end, my family deserves far more credit than I ever will for my education. Mom, thanks for teaching me to never take no for an answer. Most importantly, I need to thank my beautiful wife and three children. You have made me a better man through your unconditional love and sometimes required brutal honesty. Being able to share my life with you has been the greatest gift anyone could ever receive. To God, our father, thank you for putting the people in my life that have given me the strength to overcome the challenges I have faced.

Jeffrey C. Sandusky
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INDIVIDUAL RESISTANCE TO CHANGE

I. Introduction

On 12 July 2011, Netflix announced that they would be dividing their business into two separate pay services (Associated Press, 2012). One service would provide streaming video over the Internet while the other would deliver DVDs by mail. This change was coupled with a simultaneous price increase of 60% (Associated Press, 2012). Netflix management viewed streaming video as the future of the company and the change was an effort to begin luring people away from the more costly DVD service (Sandoval, 2012). Customers disagreed with the price change and did not like the idea of needing to visit two websites for their video needs, as well as paying two bills. In the end, the company lost nearly one million subscribers due to the change (Sandoval, 2012). A stock that traded at an all-time high of $304 a share the day before the announcement was valued at only $80 a year later (Sandoval, 2012). This disastrous event can be attributed to individual resistance to change.

In today’s times of economic uncertainty and limited resources, managing change has never been more important. A large factor in producing an effective change is to limit the amount of individual resistance to change. Resistance to change has been a contested point in individual research for nearly three quarters of a century. During this time, there have been numerous models and theories as to why individuals resist change. The one common element in previous research has been that there are numerous factors affecting the change process. Even with this knowledge, it is still estimated that between 40% - 70% of change initiatives fail (Burns, 2000).
A considerable amount of research has placed the focus on the implementation of change at the organizational level as opposed to the individual level. Hofer and Schendel (1978) noted that the results of implementing a change could have either a revitalizing or a catastrophic consequence within a firm. Lewin (1951) coined the three-stage theory of change consisting of “unfreezing”, “changing”, and “refreezing”. When it comes to the change process, his is nearly the only fully accepted theory (Dent & Goldberg, 1999a). Researchers constantly strive to find ways to define what happens in each stage of Lewin’s change theory and just how to predict it.

This research takes a unique view in seeing that resistance to change is a holistic process, existing at every stage of Lewin’s theory. Essentially the view is that every stage of the changing process is a change itself, which can be resisted independently. When “unfreezing” begins, the change is managed and controlled until the next stage; “changing” can take place. When “changing” is completed “refreezing” as a change of its own can begin. This is important because any time there is a modification to the status quo it can be viewed as a potential point of resistance.

Research Question

In order to achieve this article’s goal and help fill the gap in existing resistance to change literature, the following research question was developed: What are the antecedents for an individual to resist change? In order to gain the insight necessary to answer this overarching research question, this article will focus on two core investigative questions:

(1) What are the primary contributory factors of individual resistance in the change process?
(2) What is the nature of the relationship between these primary factors and resistance to change?

In this article, a change resistance model is introduced that provides specific influences behind the change process. The constructs of individual goals, leadership effectiveness, participation, and communication are used to explain the antecedents to individual resistance. These constructs are then examined to determine which are the strongest predictors of resistance to change.

![Diagram](image)

**Figure 1: The Research Model: Resistance to Change**

The next chapter, Chapter 2, provides a review of all the constructs used in this research. This includes a literature review of existing research related to the constructs.
Additionally, based on the literature, four hypotheses are presented to predict the individual level of resistance to change. Chapter 3 discusses the methodology and explains the sample used to test the hypotheses. This includes a description of the variables as well as the scale used for measurement. Finally, the correlation table is presented as well as the statistical regression results. Chapter 4 provides a discussion based on the results and offers insight as to why the hypotheses were or were not supported. Finally, chapter 5 concludes with managerial implications, limitations, opportunities for future research, and a summary.
II. Literature Review

Resistance to Change

Resistance to change is an unconscious defensive technique aimed at protecting the status quo (Diamond, 1986). It could also be stated that resistance to change is a reluctance to accept a different way or means of conducting an activity. This could be anything from how data is processed, to how work processes are accomplished, or even what technology is used to facilitate the work. Essentially, any time a change is made, any reservation an individual has toward the change would be considered resistance to change.

Although resistance is linked to a long line of research, it was only during the last century that it has been added to personal productivity. Coch and French (1948) were the first researchers to examine change resistance at any level (Dent & Goldberg, 1999). Their research at the famed Harwood Manufacturing Company concluded that resistance is linked to strong group-induced forces and individual reactions to frustration. These forces remain the foundational elements of resistance. It was also noted in their experiments that groups who allowed individual participation in the change process had lower resistance (Dent & Goldberg, 1999).

Equally as important as the term resistance is the term change. Change has been compared to a stone tossed into a pond (Krietner, 1992). The waves that are created from the stone entering the water travel and affect anything in their path. In this way, anyone who is touched by change will have a reaction to it in one way or another (Oreg & Berson, 2011). This reaction can be viewed as positive or negative and the individual can choose to resist or accept the change. If the individual accepts the change, the process is
done and the change may be sustainable (Lewis, 2000). Contrarily, if the individual does
not accept the change, the process of resistance is experienced.

If change can be viewed as ripples in a pond then when combined with resistance, it could further be explained through breakwaters. Breakwaters serve the purpose of shielding a ship in a harbor from the waves of the ocean (Allsop, 2001). When the waves (change) come crashing toward the shore (the individual) only the breakwaters (resistance) can stop their effects. If the waves are strong enough they can topple the breakwaters and reach the shore, but alternatively they can be stopped with a big enough breakwater, “resistance”. When resistance or the change is extremely strong, they can have a crushing effect on one another.

The process of explaining resistance to change has focused on many different influences. Oreg (2003) evaluated a four factor model consisting of routine seeking, emotional reaction to imposed change, cognitive rigidity, and short term focus. Msweli-Mbanga and Potwana (2005) evaluated access to participation in making changes, willingness to participate, and organizational citizenship behavior. Oreg and Berson (2011) looked at the specifics of leadership in resistance to change by evaluating transformational leadership, leader values, and leaders dispositional resistance to change. This research fills the void left by the past research and includes the internal as well as the external motivators of an individuals resistance to change in a single model. As explained through Process Structuration, when human actions are involved in a social structure, unexpected variables can come into the equation (Giddens, 1979). It is based on this perception that the model presents the factors of resistance to change. The model’s elements are expressed as having direct influence to the level of change.
resistance an individual exerts. The remainder of this section focuses on the influences of individual goals, leadership effectiveness, participation, and communication.

**Individual Goals**

Individual Goals can be defined in many ways but for the intent of this paper, they are viewed as a person’s, “purpose for engaging in behavior in an achievement situation” (Dweck & Leggett, 1988). Goal achievement has been found to be positivity linked to participation levels in the change process (Lines, 2004). Essentially indicating that when goals are achieved an individual is also participating more. This elaborates on the need to included both internal and external motivators into the model. By placing goals in the model, an internal motivator to individual performance is thus included. This adds the unseen internal factor of why a person chooses to resist a change or accept it. While goals can exist at both the organizational and individual levels, for the intent of this paper, the focus continues at the individual level. This is important in an effort to evaluate all antecedents at the same level. The goals focused on in this research are viewed as achievement goals, defined as having, “cognitive, affective, and behavioral consequences” (Elliot & Dweck, 1988). These are the goals a person takes on at a personal level which influences their actions in either a positive or a negative manor.

The motivational factors behind an individual’s actions can affect both resistance and performance levels. It is viewed that performance is directly related to an individual member’s understanding and acceptance of objectives (McGregor, 1960). Raia (1966) noted that when realistic goals were set for employees their performance increased. The *Goal Setting Theory* further reinforces this, explaining that when people have different performance goals they perform at different levels (Locke & Latham, 1990). Locke and
Latham expound on this explaining that the difficulty and attainability of the goals must be appropriate. The underlying concept behind these ideals is that people are more likely to perform at whatever level of expectation is levied against them.

Goals have also been linked to commitment and citizen behavior (VanYperen, N.W., Van Den Berg, S.E. & Willering, M.C., 1999). Citizenship behavior is viewed a result of loyalty, individual initiative, helping behavior, and organization allegiance (Msweli-Mbang & Lin, 2003). The nature of this relationship is derived by a comparison between the individual’s goals and the expected outcome of the change (Lines, 2004). This equates to the individuals’ effort output based on the expected outcome (Porter & Lawler, 1968). In essence, when an individual aligns their goals with a vision, they will work harder to achieve the common goal. This plays a pivotal role in the resistance to change process, as an individual who is trying to achieve a similar goal should, in theory, be less likely resist the change.

As seen in previous research, goals are a pivotal part of individual performance. By far the most internalized of the identified elements in the change resistance model, goals play a pivotal role in modifying intentions. In this model, they are predicted to have a direct impact on resistance to change. While goals have been argued as positively influencing the level of participation, here it is hypothesized that congruent goals will have negative effects to the level of resistance an individual possesses toward change.

**H1**

*Congruent goals will be negatively related to an individual’s resistance to change.*
Leadership Effectiveness

Leadership effectiveness focuses on managing and guiding the outcome of change through the use of leadership. Browne and Cohen (1958) stated, “Leadership has been recognized to an increasingly greater extent as one of the significant aspects of human activity.” Leadership effectiveness plays a critical role in how change is viewed and managed at the individual level. The leadership role is often associated with the primary responsibility of change implementation. It has been argued that how successfully or poorly a change is lead, can have a direct impact on the outcome (Cicero, L., Pierro A., & Van Knippenberg D., 2010). Leadership effectiveness is a key factor that can influence an individual’s level of resistance to change. There are several aspects that explain the process of how leadership effectiveness is derived. The first aspect of leadership effectiveness can be looked at through change agents. Change agents are facilitators designed to guide successful change through the participatory process (Holman & Devane, 1999).

The primary change agent in most change initiatives is often associated with leadership in one form or another. It can be expected that any leader today must also be a change manager (Davidson, 2002). The criticality of each change means that leaders cannot afford to let one fail. These agents are responsible for giving the vision and resources needed to accomplish a change (Kotter, 1996). Lewis, L. K., Schmisseur, A. M., Stephens, K. K., and Weir, K. E. (2006) stated that a change agent’s primary task is to promote communication and participation, facilitate change, and create vision. The
leader in this view can be thought of as the coach through the change process. The effectiveness of the change agent to accomplish change tasks can have a direct impact on the individual resistance to change.

Fiedler (1967) found that there are two basic leadership styles in his Theory of Leadership Effectiveness. These two styles were the relation-oriented and task-oriented methods of leadership. The relation-oriented style of leadership focuses on the interaction within group members and seeks prominence in interpersonal relations (Fiedler, 1967). Contrary to this, the task-oriented style of leadership focuses primarily on the task being performed and views the personnel relationships as secondary (Fiedler, 1967). This is important to the change process due to the idea that the manner in which an individual perceives each antecedent will directly affect the level of resistance that is present. While this research will not argue which of the styles is most beneficial in mitigating resistance, it is important to note that there are differences that exist.

Another view in the leadership literature is the transactional leadership verses transformational leadership styles. The focus of transactional leadership is on defining a task and managing it in a clearly defined structure (Bass, 1990). This aspect has been linked to decreased interaction complexity within an organization (Hazy, 2006). Transactional leadership is often associated with traditional leadership styles (March & Weissenger-Baylon, 1986). The transformational leadership view focuses on an individual’s internal motivation based on a vision created by the leader (Burns, 1978). This type of leadership tends to promote empowerment and intrinsic motivation within individuals. While these have been argued repeatedly in an attempt to show which proves more beneficial, it is still understood that each has its place. Aside from how
leadership is accomplished at the individual level the nature of the relationship is important to understand.

Leadership effectiveness can also be viewed as one of the most important external elements to the change process. As a primary external influence in change resistance, its effectiveness can be real or perceived. Change often leads to employee uncertainty making the effectiveness of leadership even more important during these times (Cicero et al., 2010). As change occurs, individuals are more likely to become uncertain about the expectations that will be expected from them during or after the change. This uncertainty is often derived from the newly created role ambiguity. Role ambiguity can be viewed as the unknown expectation levied against an individual. Not knowing the boundaries or expectation of the new role is a leading culprit of role ambiguity. The uncertainty in expectations can lead to dissatisfaction, stress, and anxiety (Getzel & Guba, 1954; Kahn, R. L., Quinn R. P., Snoek J. D., Rosenthal R. A., & Wolfe D. M., 1964). Each of these has the capacity to affect resistance to change. Uncertainty is explained as one of the largest obstacles for effective leadership to overcome.

Based on these views, the previously presented model explains that for every increase in leadership effectiveness there will be a simultaneous decrease in an individual’s level of resistance to change. This is a direct relationship that provides an immediately measureable result. This is a relationship that is constantly being modified and because of this, it is a critical aspect of handling change and managing resistance to that change.
**H2**

_Leadership effectiveness will be negatively related to an individual’s resistance to change._

**Participation**

The amount of direct involvement that an individual has in the change process can be thought of as their level of participation. In a more formal definition, participation can be viewed as a conscious effort by higher level individual allowing a lower level individual greater voice in organizational performance (Glew, D.J, O’Leary-Kelly, A.M., Griffin, R.W. & Van Fleet, D.D., 1995). Drawing on this, participation can be viewed as the individual’s direct involvement in the change process. This level exists separate from the individual’s goals in the fact that it is what the organization allows the individual to participate in.

Previous research has demonstrated that individual participation in change has a positive impact on outcomes (Lines, 2004). Lines further explained that this impact directly modifies an individual’s attitudes toward resisting change. Hill (1993) found that the average employee spends very little time in the participation process. It is however, generally accepted that involvement in the change process leads to better results (Coch & French, 1948). This can be by simply understanding what is going on or what is expected of the individual throughout the change. Another aspect that is important to note is that individual participation can be viewed as a result of perceived control (Blumbertg, 1969). This brings to light that the more an individual feels they are in control the more likely they are to participate and accept a change. Bandura (1986) viewed this link as a result of
the relationship between efforts and outcomes being more reliable. Essentially, if an individual has a higher participation level regarding a change, then they are less likely to be resistant to the change. A sense of ownership in the process plays a pivotal role in the success of the change process (Dirks, K. T., Cummings, L. L., & Pierce, J. L. 1996). The *Psychological Empowerment Theory* explains this as a person that feels they are in control will perform better. Conger and Kanungo (1988) explained it as a motivational concept of self-efficacy and the basis of the theory.

The construct of participation can be further dissected into different forms such as *consultative participation* and the *right to veto a decision* (Thibaut & Walker, 1975; Early & Lind, 1987). With consultative participation, the individual is placed in a situation where they feel they have the power of influence over the change, but do not have the complete decision-making or veto power (Schuster, 1984). This is an important concept as it involves individuals at a level that they feel valued but without risking unwanted input in the change process. Alternatively, the right to veto a decision gives the individual the feeling and reality of full control over the decision. This concept is more risky as the individual has the ability to modify the change being implemented. This ability to modify can jeopardize the original intent of the change through bias input. While they may seem similar, their differences are much the same as the differences in the styles of leadership. The level of participation or perceived ownership in the change is directly influenced by which form is used.

Much of the research regarding individual participation has focused on job satisfaction and productivity (Lines, 2004). While this type of research is important, it is much more appropriate in this research to think of participation in the terms of content
and rate of learning or acceptance to change and the achievement of the change objectives (Lines, 2004). This places the level of participation into a more measurable outcome. While Lines successfully hypothesized that, there is a negative relationship between participation and resistance toward change, it is important to note that the additional antecedents of resistance to change requires it to be reevaluated. As represented in the resistance model, the level of participation in the change process is hypothesized to have a direct negative relationship to resistance to change.

### H3

*Participation in a change process will be negatively related to an individual’s resistance to change.*

**Communication**

Communication during the change process is acknowledged as a critical aspect to the successful implementation of change. This research centers on communication pertaining to a change taking place and not simply conversations between individuals. By communicating before, during, and after a change has taken place there are multiple benefits that can be realized. These benefits could include such things as reduced resistance, reduced uncertainty, increased productivity, or even increased openness. Researchers, specifically those studying resistance, have centered their efforts on the use of clear communication to disseminate information (Miller, V. D., Johnson, J. R., & Grau, J., 1994). Small meetings and informal discussions have been cited as the most used methods of passing information; however, it is focus groups, questionnaires, formal surveys and face-to-face communication that have been identified as the best ways to
cope with change resistance (Lewis, 1999; Maurer, 1996). This highlights the importance of getting information to individuals in an effort to help them understand the change that is occurring. Lewis (2000) found in her research that communicating vision and negative attitudes were some of the largest problems associated with change.

Within the communication process, there are specific aspects that deserve special consideration. Lawrence (1954) noted in his ways to deal with change resistance that the creation of understandable terms was extremely important. This is noteworthy specifically in reducing ambiguity regarding the change-taking place. Equally important is the need to keep rumors at bay by communicating probabilities, especially during uncertain times (Larkin & Larkin, 1994). These aspects help to reduce uncertainty or a perceived inability to predict something accurately (Milliken, 1987). By reducing uncertainty through communication, the change process can remain focused on the implementation, not the individuals.

The Anxiety/Uncertainty Management Theory (AUM) explains much of the effect of uncertainty in the communication process (Gudykunst, 1988, 1993, 1995, 1998). Adapted from Berger and Calabrese’s 1975 Uncertainty Reduction Theory, AUM concludes that managing anxiety and uncertainty are vital in the effectiveness of communication (Stephan, W. G., Stephan, C. W., & Gudykunst, W. B., 1999). AUM explains that people are able to communicate to the level they can predict the attitudes and behaviors of others as well as manage their own anxiety (Stephan et al., 1999). This relates directly to resistance to change in that communicating a change can reduce anxiety and uncertainty levels by providing information to help predict attitudes and
behaviors of others. By managing uncertainty and anxiety through communication during a change, the level of resistance could also be reduced.

It is important to note in the management of communication that during a time of change there is a hunger for new information (Duck, 2001). This makes it important to deliver regular updates even when there may be no specific update to pass on (Duck, 1998). This will help continually maintain a level of involvement and understanding regarding the change process. It was also urged by Coch and French (1948) for leaders to hold meetings as a group to communicate the need for change. This provides an opportunity for individuals to gain a sense of involvement and feel they have a level of control over the situation (Blumberg, 1969). This relates back to the *Physiological Empowerment Theory*. Base on this theory the active orientation provides the individual the ability to shape his or her work role (Spreitzer, 2005).

The need for communication flows in both directions as well as does the need for feedback, which is equally important. Ashford and Cummings (1983) noted that feedback improved performance, reduced uncertainty, enhanced self-image, and managed self-presented goals. By allowing communication in both directions during a change, the likelihood of a misunderstanding taking place is severely reduced. This use of clear communication allows the change process to take place much more smoothly and helps reduce resistance (Miller et al., 1994).

The idea of communication playing a pivotal role in the change process is not a revolutionary concept but certainly a notable one. In fact, Lewis et al. (2006) found that in her review of popular press books it was quite extensively covered. The research into the subject that has taken place justifies the inclusion of communication as a vital player...
in the resistance model. In the model of resistance to change, it is predicted that for every increase in communication regarding the change process there will be a decrease in resistance.

\textit{H4}

\textit{Communication regarding the change process will be negatively related to an individual’s resistance to change.}
III. Methodology

The intent of this study is to determine the relationship between individual goal, communication, participation, leadership effectiveness, and resistance to change. This study uses archival data collected during a 2008 survey of government employees in the Midwest United States. Five measures are used in this study; change leadership, participation, communication, individual goals, and behavioral reaction to change.

Procedures

The data set was collected through two surveys conducted between January 2008 and December 2008 at three governmental organizations. A summary of the research variable statistics used in the survey are presented in Appendix A. The questionnaires were delivered by mail to pre-identified points of contact within each organization. The contacts distributed the questionnaires to each organizational member. Attached to each questionnaire was a letter stating the survey’s purpose as well as contact information for the researcher. For ease of return, a self-addressed stamped envelope was provided with each questionnaire. Participation in the survey was purely voluntary, and anonymity for the respondents was maintained at all times.

Sample

The survey invited members in three Midwest government organizations to participate. Of the 769 invited, 464 responded, of which 447 surveys were found to be useable. The 17 removed were based on the individuals being contractors and non-state employees, which was a requirement for participation. Demographics of the survey broke down as follows: 360 of 447 responded to the gender question with a breakdown of
66.4% male and 33.6% percent female. Age of participants ranged from 22-72, n = 339, Mean = 48, and SD = 10.75. Education levels were recorded as 6.5% high school, 18.8% some college, 15.5% associate degree, 44.0% bachelor’s degree, 15.2% graduate degree. Tenure in current position ranged from 0-31 years n = 347, Mean = 5.13, and SD = 5.19. A complete breakdowns of demographics are provided in appendix B.

Measures

There were five measures used in this study, which include: (a) individual goals (b) leadership effectiveness, (c) participation, (d) communication, and (e) behavioral reaction to change. The items used in each measure are listed in Appendix C. Each variable was measured using a 5-point Likert-scale which ranged from “Strongly Disagree (1)” to “Strongly Agree (5)” unless otherwise specified.

Individual Goals

Individual goals were assessed using the results from four weighted questions. Subjects were asked to rate the importance of the specific goal factors within their organization. Respondents were asked to distribute 20 points among the four choices with the most important receiving the most points. The total of all four choices had to equal 20 points and collection took place at time one. Due to the nature of the coding on the construct, a Cronbach’s alpha could not be computed. Descriptive statistics for the collected sample were n = 446, Mean = .81, and SD = 0.09. The specific questions asked to each participant are listed in appendix C.
**Leadership Effectiveness**

Study participants were each asked to rate their organization’s leadership effectiveness based on the scale devised by Wanberg and Banas (2000). Participants were asked three questions that directly reflected their perception of the organization’s leaderships’ effectiveness at managing change. Each of the responses was measured using a five-point Likert scale and collected at time one. Cronbach’s alpha for leadership effectiveness was .90 with the remaining descriptive statistic of the sample being n = 444, Mean = 3.22, and SD = 0.97. The specific questions asked to each participant are listed in appendix C.

**Participation**

The variable of participation was created using a series of four questions. These questions focused on the individual’s level of participation in the change process. The scale used to measure this was derived from Wanberg and Banas (2000). Each of the responses was measured using a five-point Likert scale and collected at time one. Cronbach’s alpha for participation was .90 and the remaining descriptive statistic of the sample were n = 435, Mean = 3.12, and SD = 0.96. The list of the specific questions asked to each participant is available in appendix C.

**Communication**

The variable of communication was evaluated based on answers to five questions. These questions were specifically targeted at capturing the information flow within the organization during the change process. Respondents were asked to rank the items based on a scale adopted from research conducted by Wanberg and Banas (2000). Each of the
responses was measured using a five-point Likert scale and collected at time one. Cronbach’s alpha for communication was .92 the remaining descriptive statistic of the sample were n = 437, Mean = 3.13, and SD = 0.86. The specific questions asked to each participant are listed in appendix C.

**Behavioral Reaction to Change**

Behavioral reaction to change was based on the responses to a series of six questions. These questions focused on the behavioral reaction of a change that had taken place within the respondent’s organization. Each of the responses was measured using a five-point Likert scale and collected at time two. Cronbach’s alpha for behavioral reaction to change was .90. Descriptive statistics for the collected sample were n = 377, Mean = 3.32, and SD = 0.72. This construct was operationalized as the opposite of individual resistance to change. The specific questions asked about how change had positively affect the individual. When asked in this manner the results presented the opposite of resistance to change. The measure used was scaled based on the methods of Dirks et al., (1996). The specific questions asked to each participant are listed in appendix C.

**Analysis**

A multiple regression was used in order to test the four hypotheses. Based on Cohen (1992) the sample size needed for a .80 power and small effect size at the .05 level was 274. Since the sample was 447 it meant that it was significantly larger than the suggested level. It is therefore presented that the sample is adequately sized with enough power to test the hypothesis. The first step in the model validation process was to
produce a correlation table using SPSS as the statistical tool. This was followed by running a linear regression test with the dependent variable and all independent variables entered at the same time. Next, a stepwise linear regression was conducted to measure the predictive power of each independent variable. In an effort to minimize this study’s common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), the researcher used predictor variables measured from time one and the criterion variable measured at time two.

Results

After running the multiple regression the following results were produced. The Pearson correlation for the variables was above .5 with the exception of goals, which was under .1 for all measures. Significance was below p < .01 for all measures with goals being the exception. Beta weights for the measures were all positive with goals being the only negative value produced. The model validated at an adjusted R² of .41 and a significance of p < .01. Cronbach’s Alpha for the model was .79. A complete breakout of all the results is listed in Tables 1-3.

Table 1: Construct Correlations and Reliabilities

<table>
<thead>
<tr>
<th>Construct</th>
<th>Pearson Correlation</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.90</td>
<td>444</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.516*** (.90)</td>
<td>435</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.619*** .746*** (.92)</td>
<td>436</td>
<td>.90</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Reaction to Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.516** .677** .586** (.90)</td>
<td>376</td>
<td>.90</td>
<td>.90</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>-.069 -.088 -.095* -.099*</td>
<td>443</td>
<td>.90</td>
<td>.90</td>
<td>.90</td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>

**: Correlation is significant at the 0.01 level (2-tailed).
*: Correlation is significant at the 0.05 level (2-tailed).
Table 2: Model Summary Statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.577*</td>
<td>.333</td>
<td>.331</td>
<td>56445</td>
<td>.333 186.212</td>
<td>1 373 .000</td>
</tr>
<tr>
<td>2</td>
<td>.629*</td>
<td>.396</td>
<td>.393</td>
<td>55994</td>
<td>.063 38.753</td>
<td>1 372 .000</td>
</tr>
<tr>
<td>3</td>
<td>.638*</td>
<td>.409</td>
<td>.404</td>
<td>55167</td>
<td>.013 8.137</td>
<td>1 371 .006</td>
</tr>
<tr>
<td>4</td>
<td>.642*</td>
<td>.412</td>
<td>.406</td>
<td>55900</td>
<td>.008 2.044</td>
<td>1 370 1.001</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Participation
b. Predictors: (Constant), Participation, Change Leadership
c. Predictors: (Constant), Participation, Change Leadership, Communication
d. Predictors: (Constant), Participation, Change Leadership effectiveness, Communication, Individual Goals
e. Dependent Variable: Behavioral Reaction to Change

Table 3: Model Coefficients

<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>-1.922</td>
<td>.291</td>
<td>-.234</td>
<td>-6.608</td>
</tr>
<tr>
<td>Change Leadership</td>
<td>-.174</td>
<td>.038</td>
<td>-.234</td>
<td>-4.592</td>
</tr>
<tr>
<td>Participation</td>
<td>-.236</td>
<td>.045</td>
<td>-.316</td>
<td>-5.253</td>
</tr>
<tr>
<td>Communication</td>
<td>-.152</td>
<td>.054</td>
<td>-.183</td>
<td>-2.796</td>
</tr>
<tr>
<td>Individual Goals</td>
<td>.458</td>
<td>.320</td>
<td>.057</td>
<td>1.430</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Behavioral Reaction to Change

The $R^2$ from the stepwise regression shows that participation alone contributed to .33 of the explained variance alone. This indicated that participation was the largest contributor to individual resistance to change. Adding change leadership to the model added another .06 of explaining power to the model. While the amount explained was small, the significance of $p < .01$ indicated that it was an important contributor. When communication was included, it added another .01 in variance explained. This construct had significance below $p < .05$ showing it to be an important contributor as well. Individual goals added less than .01 and had significance above $p < .05$. While this did
add slightly to our model’s predictive ability, it was not produced at a significant level. These statistics are detailed in table 2.

The analysis has shown support for some, but not all the hypotheses. Goals had a lack of significance as well as a standardized Beta of -.057 indicating that H1 was not supported in the model. This lack of support is most likely due to the data set used. With goals being such an internalized aspect of human action a data set collected specifically to measure this could potentially be more accurate. Data analysis on change leadership provided full support for H2 yielding a statistically significant result and a standardized Beta of .23. The result of H3 supported participation in the model with a statistically significant result and a standardized Beta of .32. Finally, H4 was supported with a statistically significant result and a standardized Beta of .18. These statistics are detailed in table 3. The result of a Durbin-Watson test was 1.9 shows a positive correlation between adjacent residuals. The closeness to 2 indicates almost certainly that statistical assumptions have been met (Fields, 2009). A histogram of the model residuals is presented in appendix B.
IV. Discussion

The model of resistance to change presents factors that lead to individual resistance to change. By examining each independently, the relationship between several of them emerged. The elements of participation and communication are often researched synonymously but within this model, they held independently (Coch & French, 1948); (Belasco, 1991). When evaluated as independent elements of the model, each holds equal importance to the change process. This is an important aspect because limited participation with high communication or vice versa would still have an impact on the level of resistance. This is demonstrated by the analysis showing that that each produced significance in $R^2$.

Contrary to expectations, goals did not prove to be as decisive as hypothesized in the model. The results show that goals created very little influence in the individual level of resistance to change. The sample used a set of factors that distribute a set number of points across four questions. While this produced a $R^2$ it did not do so with significance. A better test for this hypothesis would be to use questions directly aimed at the construct and measured in the same scale as the other three.

It is still hypothesized that goals would have an influence, but a new sample is needed to validate it. This view is based on past research previously presented here. The Goal Setting Theory indicates that individual goals should produce a measurable effect in resistance to change. It is possible that the convergence of goals at the individual and organizational levels create difficulty in measuring them. Another possibility is that goals are simply an aspect of leadership effectiveness and thus difficult to capture independently (Giessner & Knippenberg, 2008). Goals are viewed as being internally
driven and creating a motivational factor of accomplishment that could aid or distract from change.

Leadership effectiveness proved to be an extremely important concept in the change process as demonstrated by the support of H2. This element held important aspects of the model that were not included elsewhere. As expressed by Burke and Litwin (1992), leadership is a cornerstone in understanding change. The *Theory of Leadership Effectiveness* indicates the importance to effective leadership (Fiedler, 1967). Here leadership effectiveness is validated as either facilitating the change or detracted from it. One item that became apparent in the review was that internal motivation is just as important of a factor, and equally motivational, as external motivation.

The element of participation also showed statistical importance with the support of H3. One explanation for the importance of participation is that it fills the fundamental need of human development (Argyris, 1957). The basis of this argument is that there are certain processes that take place as a person transitions from dependent to independent (Pasmore & Fagan, 1992). This has been a foundational argument ranging over 50 years and still ongoing today (Argyris, 2004). Participation is just one of the ways that this maturing process can take place. The *Psychological Empowerment Theory* further explains this as filling a need in self-efficacy (Conger & Kunungo, 1988). When these individual level needs are met, the level of resistance to change is decreased.

The support of H4 showed the importance of communication to reduce the resistance level during the change process. Since implementers often misjudge communication needs during a change, it is vital to capture this element (Lewis, 2000). As reviewed by Lewis et al. (2006), the importance of communication in change is an
extensively supported element in past research. As explained by AUM managing anxiety and uncertainty through communication is vital in effective communication (Stephan et al, 1999). This support is continued with this research highlighting the continuation for the need to communicate during change.

The influences included in this model highlight that when a change is communicated with effective leadership to an individual that can participate, resistance will be lower. These negative relationships highlight that as each is increased; the resistance is decreased making the change happen easier.
V. Conclusion

Managerial Implications

The managerial implications of this research exist primarily in helping managers better understand when change occurs and why people resist it. This study presented that change occurs continually and is a constantly evolving process. This makes researching where individual resistance comes from vital to organizational survival. By furthering this understanding, the likelihood of producing a sustainable change is significantly increased. Managers need to understand which aspects are lacking or will return the largest dividends during the change process and strive to fulfill those needs.

This study shows that there are specific areas of focus that can decrease resistance during change. Knowing these areas as well as the antecedents involved substantially increases the manager’s ability to predict outcomes. Understanding why people do things is one of humankind’s greatest challenges, but predicting resistance to change might just be explainable. Capturing and utilizing this knowledge can make all the difference when it comes to the success of an important organizational change being accepted by those expected to implement and execute it.

Limitations

One limitation to this study is the fact that the sample came from the same source. Same source bias is a potential problem that comes from research conducted in his way (Podsakoff et al., 2003). In an effort to minimize this problem the data was collected at two separate times. Although this does not completely remove the bias it does limit the effect it has on the sample.
The data set used to test the H1 was most likely not appropriate due to the coding of the questions. If the data was recaptured questions that would better capture the construct and share the same scale should be used. The results of H1 are presented in fairness and thoroughness to this study. The full lists of the questions used to measure the constructs are presented in appendix C.

The previously stated amount and length of existing research on this topic precludes the inclusion of everything written on the subject. The presented model is provided based on a compilation of many different concepts, in an effort to broaden the view of resistance to change. As with nearly any model that involves human interaction, it is nearly impossible to predict exactly how each person will react to a change. While it is not the author’s attempt to use this fact as an excuse, it is important to note. This model is based on the average individual’s response to and the influential factors of exposure to change.

**Future Research**

One factor was removed from the model due to a lack of support. It was originally hypothesized that the scope of change would have a direct impact on the level of resistance that an individual would exert toward a change. This element was derived from logical deduction, but due to the lack of supportable literature, was removed from the model. Scope was run in a multiple regression of the resistance to change model and produced no significance. While scope did not have a direct effect, it is beyond the scope of this paper to rationalize it at this time. Future research could focus on bringing scope
back into the model in a defendable manor. When examined in this light, the model may show additional benefits not yet detected.

Conclusion

This paper has presented and explained the model of resistance to change. Starting with examining resistance to change the need for an understanding was created. The first of the model’s influences, individual goals, proved to be a vital internal motivator in the change process. Leadership effectiveness demonstrated that the way things are handled in an organization is critical to successful change. Participation in the change process showed that a feeling of involvement reduces resistance. The final factor, communication, expressed the importance to relay a change to individuals. After the discussion, the importance of resistance to change was expressed, as was the need for future evaluation of the model.

With the pace of society as well as the abundance of business changes today, it has become critical to understand resistance to change. There is more change facing organizations today than ever before (Conner, 1992). To explain that every leader must be a change manager is almost an understatement. They have to understand and be able to implement change. This can often be the difference between survival and failure. With 50% to 75% of potential change initiatives resulting in failure, the odds of success are certainly against change (Majchrzak, 1988). By understanding what creates or decreases resistance to change, a better appreciation can be developed. For many organizations, a successful change effort may be a last hope for survival.
Appendix A – Sample Statistics

*Table 3: Gender Statistics*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Male</td>
<td>239</td>
<td>53.5</td>
<td>66.4</td>
<td>66.4</td>
</tr>
<tr>
<td>Female</td>
<td>121</td>
<td>27.1</td>
<td>33.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>360</td>
<td>80.5</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>87</td>
<td>19.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>447</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 4: Age Statistics*

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>338</td>
<td>22</td>
<td>72</td>
<td>47.85</td>
<td>10.398</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>338</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 5: Education Statistics*

<table>
<thead>
<tr>
<th>Education (highest level)</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<tr>
<td>Valid High School</td>
<td>24</td>
<td>5.4</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Some College</td>
<td>69</td>
<td>15.4</td>
<td>18.8</td>
<td>25.3</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>57</td>
<td>12.9</td>
<td>15.5</td>
<td>40.8</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>162</td>
<td>36.2</td>
<td>44.0</td>
<td>84.8</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>56</td>
<td>12.5</td>
<td>15.2</td>
<td>100.0</td>
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<tr>
<td>Total</td>
<td>368</td>
<td>82.3</td>
<td>100.0</td>
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<tr>
<td>Missing System</td>
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<td>Total</td>
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<td>100.0</td>
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</table>
Table 6: Tenure Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure in current position</td>
<td>347</td>
<td>.00</td>
<td>32.00</td>
<td>5.1260</td>
<td>5.18906</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>347</td>
<td></td>
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</table>
Appendix B – Regression Results

Table 8: Model Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Leadership</td>
<td>444</td>
<td>1.00</td>
<td>5.00</td>
<td>3.2237</td>
<td>.97292</td>
</tr>
<tr>
<td>Participation</td>
<td>435</td>
<td>1.00</td>
<td>5.00</td>
<td>3.1115</td>
<td>.95984</td>
</tr>
<tr>
<td>Communication</td>
<td>437</td>
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<td>5.00</td>
<td>3.1278</td>
<td>.85555</td>
</tr>
<tr>
<td>Behavioral Reaction to</td>
<td>377</td>
<td>1.00</td>
<td>5.00</td>
<td>3.3219</td>
<td>.71554</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Goals</td>
<td>446</td>
<td>.25</td>
<td>1.00</td>
<td>.8094</td>
<td>.08968</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>375</td>
<td></td>
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</tbody>
</table>

Table 9: ANOVA Statistics

ANOVA<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
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<tbody>
<tr>
<td>1 Regression</td>
<td>78.730</td>
<td>4</td>
<td>19.683</td>
<td>64.054</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>112.291</td>
<td>370</td>
<td>.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>191.022</td>
<td>374</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Behavioral Reaction to Change

<sup>b</sup> Predictors: (Constant), Individual Goals, Change Leadership, Participation, Communication

Table 10: Residual Statistics

Residuals Statistics<sup>a</sup>

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>2.0272</td>
<td>4.3634</td>
<td>3.3174</td>
<td>.45881</td>
<td>375</td>
</tr>
<tr>
<td>Residual</td>
<td>-2.21222</td>
<td>1.95677</td>
<td>.00000</td>
<td>.54795</td>
<td>375</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>-2.812</td>
<td>2.280</td>
<td>.000</td>
<td>1.000</td>
<td>375</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-4.016</td>
<td>3.552</td>
<td>.000</td>
<td>.995</td>
<td>375</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Behavioral Reaction to Change
Figure 2: Residuals Histogram
Appendix C – Survey Questions

Leadership effectiveness survey questions:

1. Overall, the State IT leadership has led to the implementation of change effectively.
2. Generally, the State IT leadership has been able to unite the employees to make these changes a success.
3. The State It leadership has taken steps to provide the resources needed for the change.

Participation survey questions:

1. I have been able to ask question about the changes at work before they were implemented.
2. I have been able to participate in implementing changes at work.
3. I have had some control over implementing changes at work.
4. I am able to have input into the decisions being made about the changes at work.

Communication survey questions:

1. The information I have received about the changes at work has been timely.
2. The information I have received about the changes at work has been useful.
3. I understand what I am supposed to do on my job after these changes are implemented.
4. The information I have received adequately answers my questions about the changes at work.
5. I have received adequate information about the changes at work before they were implemented.

**Individual goals survey questions:**

1. Cost (e.g. reducing cost or more efficient use of resources).
2. Quality (e.g. reducing errors, increasing reliability, increasing security).
3. Internal customer satisfaction (e.g. other departments or agencies).
4. End-user customer satisfaction (e.g. taxpayer or service recipient).

**Behavioral reaction to changes survey questions:**

1. The changes help me perform better at work.
2. The changes tend to stimulate me.
3. The changes help improve unsatisfactory situation at my organization.
4. I do whatever possible to support the changes.
5. I find going through these changes to be pleasing.
6. I benefit from the changes.
Bibliography


Vita

Master Sergeant Jeffrey C. Sandusky enlisted in Air Force Delayed Entry Program in September of 1997 and graduated from Bernie High School in May 1998. Sergeant Sandusky arrived at his first duty station, Randolph Air Force Base, Texas in November 1998 and was assigned to the 12th Transportation Squadron as a Vehicle Operator. In March of 2002, he retrained as a Computer Operator was assigned to Scott Air Force Base, Illinois where he served in various roles in the 868th Communications Squadron. In July 2004, Sergeant Sandusky was reassigned to Al Udied Air Base, Qatar where he served as the Senior Systems Administrator for the Combined Air Operations Center. In August 2005, he moved to Lackland Air Force Base, Texas where he service in various roles within the Intelligence, Surveillance, and Reconnaissance Agency. In February 2006, he earned his Associates Degree in Information Systems Technology from the Community College of the Air Force. In April 2009, MSgt Sandusky was reassigned to the 354th Fighter Wing Eielson AFB Alaska. There he served as the communications squadron superintendent and the Fighter Wing deputy Inspector General. In August 2010, he graduated with a Bachelor of Science Degree, in Information Technology management with honors from American Military University. In March 2011, Sergeant Sandusky was accepted into the Enlisted-to-AFIT Program where he has worked towards a Master of Science Degree in Information Resource Management from the Air Force Institute of Technology at Wright-Patterson AFB, Ohio. Sergeant Sandusky is married to the former Patricia J. Berger of San Antonio, TX. Together they have three children, Kara, Cameron, and Lucas. Upon graduation, he will be assigned as the superintendent of AFIT SC at Wright-Patterson AFB.
**Individual Resistance to Change**

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**Abstract**

This thesis examines individual resistance to change and concludes that it is a constantly evolving process with many contributing factors. Defining resistance to change is a challenge within its own right. To account for the actions involved in change resistance is an even more complex undertaking. In this research, resistance to change is examined and explained using the influences of goals, participation, leadership effectiveness, and communication. These factors are expressed as the composition of what makes an individual resist or accept a change. Each of the four elements of resistance to change are examined independently and then synthesized into a model.

**Subject Terms:** Resistance to Change, Change management, Goals, Leadership Effectiveness, Participation, Communication

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