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Company, country, connections:

Counterfactual origins increase organizational commitment, patriotism, and social investment

Hal Ersner-Hershfield

Adam D. Galinsky

Northwestern University

Laura Kray

University of California – Berkeley

Brayden King

Northwestern University

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Abstract

Four studies examined the relationship between counterfactual origins – thoughts about how the beginning of institutions and relationships might have turned out differently – and increased feelings of commitment to organizations, countries and social connections. Study 1 found that counterfactually reflecting on the origins of one’s country increased patriotism. Study 2 extended this finding to organizational commitment and examined the mediating role of poignancy. Study 3 found that counterfactual reflection boosts organizational commitment even in the face of other commitment-enhancing appeals and that perceptions of fate mediate the positive effect of counterfactual origins on commitment. Finally, Study 4 temporally separated the counterfactual manipulation from a behavioral measure of commitment, and found even two weeks later that counterfactual reflection predicted whether participants emailed social contacts. The robust relationship between counterfactual origins and commitment was found across a wide range of companies and countries, with undergraduates and MBA students, and on attitudes and behaviors.

On April 18, 1775, Paul Revere took a fateful midnight ride to alert his fellow colonists of the impending march by the British Army, a ride that produced a sizable militia that stood down the superior British fighting force. Almost 200 years later, Fred Smith, the founder of FedEx, flew one fateful night in 1973 to a Las Vegas casino in a desperate attempt to help his then-floundering company meet payroll (Foust, 2004).

The United States and FedEx are both marked by strong commitment of their various stakeholders, and an almost fanatical devotion to their missions. Americans express more national pride than citizens from any other country (Smith & Kim, 2003) and FedEx is regularly listed in *Fortune* magazine's list of top companies to work for (Levering & Moskowitz, 2009).

Indeed, research has long shown that commitment is a critical ingredient of successful institutions and relationships. It buffers the relationship between stress and job displeasure (Begley & Czajka, 1993), drives job involvement and satisfaction, leads to better job performance (Mathieu & Zajac, 1990), and is negatively related to turnover (O'Reilly & Chatman, 1986). Similarly, interpersonal commitment leads to relationship (Sprecher, 2001), and numerous economic benefits (Portes, 1998). In short, commitment can be a determining factor in success.

Not only do America and FedEx inspire patriotism and commitment, but both also possess origins that breed counterfactual reflection, or thoughts about how events might have and almost turned out differently. It is easy to imagine how democracy might not have flourished without Revere's ride or how FedEx might not exist today if Smith hadn't made his blackjack bet.

These examples present origins that invite counterfactuals and employees and citizens that offer their devotion. In the present research, we sought to determine whether reflecting

counterfactually about origins actually inspires patriotic expressions in citizens, commitment to companies in employees, and behavioral investment in important social contacts.

Counterfactual Reflection and Finding Meaning

Counterfactual reflection can increase a sense of meaning. Kray et al. (2010) showed that if a particular turning point was thought about in counterfactual terms, then that turning point became a more meaningful part of one's life. Similarly, Koo, Algoe, Wilson, and Gilbert (2008) found that individuals expressed greater satisfaction with positive life events when they imagined how they might not have happened. Counterfactual reflection about events in one's life highlights the opportunities, relationships, and achievements that would not have occurred without those key links in one's life narrative (Davis, Nolen-Hoeksema, & Larson, 1998).

The current research explores a much broader phenomenon: how reflecting counterfactually on the origins of countries and companies inspires increased commitment, which is defined as emotional attachment to, identification with, and involvement in an institution (Allen & Meyer, 1990). In the present research, we propose that the effects of counterfactual reflection extend not just to personally relevant events, but also to institutions with counterfactual origins. Our goal was not only to establish a robust relationship between counterfactual reflection of origins and commitment but also to demonstrate the underlying processes. First, previous research suggests that when one perceives that something positive in one's life will no longer be present, a mix of happiness and sadness – or poignancy – arises; realizing that a pleasurable activity is coming to a close brings its most positive qualities to the forefront of attention (Ersner-Hersfield, Mikels, Sullivan, & Carstensen, 2008; Larsen, McGraw, & Cacioppo, 2001). Thus, when graduating seniors think about the short time they have left in college, they feel more positively about their university (Kurtz, 2008). Theoretically,

recognizing that something cherished could soon be gone fosters a greater sense of appreciation for it similar to thinking about how something might not have come into existence will increase its meaning (Kray et al., 2010). Thus, we hypothesized that thinking about how things could have been different (through counterfactual reflection) will also evoke a “near-loss” mindset (Markman & McMullen, 2003), and that the resulting poignancy will produce commitment to the institution to which one belongs (i.e., a company or country) and to important social contacts.

Second, based on Kray et al.’s (2010) work, we reasoned that perceptions that things were “meant to be” would help account for the effect of counterfactual reflection on organizational commitment. Thinking about how any one outcome (e.g., the successful start to an organization) has many possible alternative paths highlights how remarkable it is that events were connected and turned out the way they did. Ironically, thinking about these alternatives can enhance a sense of inevitability that it could not have happened by chance alone, but must have been fated. By helping to forge connections and relationships between concepts (Kray, Galinsky, & Wong, 2006), counterfactual reflection reduces the perception that an otherwise discrete set of random events are connected, thereby enhancing their meaning. Because fate mediates the relationship between counterfactual considerations and finding meaning in an event (Kray et al., 2010), we predict that counterfactual origins will increase a belief that connections to an institution were predestined and ultimately lead to greater commitment to one’s country or organization.

Koo et al. (2008) have also identified a third mediator – surprise – linking how imagining a positive event might not have happened to satisfaction with that event. We think that poignancy, fate, and surprise all represent a combination of wonder and coherence that counterfactual thinking produces. The sudden surprise at considering an event that almost

wasn't, the prospective nostalgia for a hypothetical loss, and perceptions that an event was meant to be, all give an event an internal coherence that seems remarkable. As a result, counterfactual reflection will make events seem more meaningful (Kray et al., 2010) and satisfying (Koo et al., 2008), and, as we hypothesize, will inspire greater commitment.

Overview

The present research seeks to document whether counterfactually reflecting on origins will increase commitment to those institutions and social contacts. Study 1 explores whether counterfactual reflection can increase patriotic feelings. Study 2 extends this finding to organizational commitment and examines two additional effects that link the past to the present and the future: the mediating role of poignancy and the tendency for counterfactual reflection to brighten the perceived future trajectory of one's organization. Study 3 seeks to establish whether counterfactual reflection can have positive effects on behavior above and beyond other established commitment-enhancing factors. In addition, Study 3 examines whether fate, or a sense that things were meant to be, underlies the effect of counterfactual origins on organizational commitment. Finally, Study 4 extends the first three studies by temporally separating the counterfactual manipulation from a measure of commitment and by demonstrating that counterfactual reflection can affect a behavioral measure of commitment.

It is important to note that the current research is the first to investigate whether the origins of institutions, such as companies and countries, can be conceived in counterfactual terms and whether counterfactually reflecting on these origins drives institutional commitment. In addition, it is also the first to explore whether counterfactual reflection produces behavioral effects even when those effects are removed in time from the counterfactual manipulation. Finally, through the current research we develop a parsimonious understanding of the underlying

processes that connect counterfactual thinking to increased meaning and commitment; we articulate that multiple mediators represent a common underlying process – the wonder and coherence-enhancing function of counterfactual thinking – that drives the effects of counterfactual reflection on commitment (but not the effects of other commitment-inducing manipulations). Ultimately, we add a shifting temporal perspective to the counterfactual reflection and meaning literature by showing how we come to understand the past has important implications for our present commitment and our future forecasts.

Study 1: Counterfactual Reflection and Patriotism

Past research has attempted to increase patriotism through appeals to citizen participation (Boyte, 2003) or by making one's country more personally relevant and sentimental (Druckman, 1994). We tested the idea that reflecting counterfactually on one's home country's origins would produce greater feelings of patriotism toward that country. We asked all participants to reflect on how their country came into being, but had one group of participants reflect on what their world would be like if their country hadn't come into being (counterfactual reflection), and another group to consider what their world is like because of their country's existence (factual reflection). We predicted that counterfactual reflection would increase patriotic attitudes compared to the factual-reflection condition.

Method

Forty undergraduates (25 women, 30 from the U.S.) were randomly assigned to a counterfactual or factual reflection condition. In the *counterfactual-reflection condition*, participants were asked to imagine their home country's origins, "keeping in mind all of the key events and pivotal people that might have been different" and to "write down what your country and world would be like in this alternative universe where these key events and people had not

existed”. Participants in the *factual-reflection condition* were asked to imagine their home country’s origins, “keeping in mind all of the key events and pivotal people that led to it existing” and to “write down what your country and world are like because these key events and people existed”.

All participants were then given Kosterman and Feshbach’s (1989) measure of political attitudes ($\alpha=.80$), which contains 10 questions that assess patriotism on 7-point scales (e.g., “I am proud to be a member of my home country”).

Results and Discussion

As predicted, participants in the counterfactual condition demonstrated significantly higher patriotic attitudes toward their home countries than did participants in the factual condition, $t(38)=2.00$, $p=.053$, $d=.65$ (means for counterfactual and factual reflection in all Experiments can be found in Table 1). We also tested whether country of origin moderated the effect and it did not, $F(1,40) < 1$. In short, thinking about how one’s home country might not have existed produced greater feelings of commitment toward that country, regardless of the country in question.

Study 2: Counterfactual Reflection, Organizational Commitment, and Mediators

Study 2 explored whether counterfactual thoughts would produce greater commitment to work organizations. Although previous research has bolstered feelings of organizational commitment by creating synergies between employees’ values and organizational values (Boxx & Odom, 1991) and increasing the flexibility of work hours (Scandura & Lankau, 1997), we believe that another route to increasing organizational commitment is by counterfactually reflecting on the company’s origins. Accordingly, we asked participants to think of their

company's origins in counterfactual or factual terms, and predicted that the participants in the counterfactual condition would score higher on an organizational commitment scale.

Study 2 was also designed to test two additional effects. First, we assessed the mediating role of poignancy on the relationship between counterfactual reflection and organizational commitment. Because recognizing the scarcity of an entity increases appreciation for that entity (Cialdini, 1993; King, Hicks, & Abdelkhalik, 2009), we hypothesized that thinking about how one's organization almost didn't come into being would lead to poignant feelings, which would in turn increase feelings of commitment. Second, we examined the link between reflections of the past and perceptions of the future; we predicted that thinking counterfactually about the origins of one's company would strengthen perceptions that its future trajectory is positive.

Method

Participants were 97 part-time and full-time MBA students (33 women), who participated as part of an exercise prior to a lecture on organizational culture and were randomly assigned to a counterfactual- or factual-reflection condition. In the *counterfactual-reflection condition*, participants wrote down the story of their company's origins and described "all of the possible ways that the company might not have come into being, and the key events and pivotal people that may have been different". In the *factual-reflection condition* participants wrote down the story of their company's origins and described "all the ways that the company came into being, and the key events and pivotal people that led to it existing".

Organizational commitment. Participants completed the affective commitment subscale of the Allen and Meyer (1990) organizational commitment scale (8 questions ($\alpha=.90$), which assesses how much employees work for their companies because they *want* rather than *need* to (e.g., "This organization has a great deal of personal meaning to me").

Poignancy. Participants were asked to imagine the extent to which they would feel six different emotions (measured on 7-point scales: excited, happy, sad, proud, bittersweet, nostalgic) on the last day that they would work at their company (part-time MBAs) or the last day that they did work at their company (full-time MBAs). As in previous research (e.g., Ersner-Hershfield et al., 2008), poignancy was operationalized as the minimum amount of happiness and sadness that a participant indicated feeling (e.g., a '3' on happiness and a '5' on sadness would equal a '3' on poignancy).

Assessment of company's trajectory. Participants were asked to choose among 5 different drawings representing possible trajectories for their company (two showed increasingly positive trajectories, one a neutral trajectory, and two increasingly downward (negative) trajectories (see Figure 1).

Results & Discussion

As predicted, participants in the counterfactual condition demonstrated higher commitment to their organizations than participants in the factual condition, $t(95)=1.93$, $p=.056$, $d=.40$.

To examine whether feelings of poignancy mediated the relationship between counterfactual reflection and organizational commitment, we first regressed poignancy scores on counterfactual reflection condition (0=factual reflection; 1=counterfactual reflection), and found that participants in the counterfactual condition felt more poignancy than did participants in the factual condition, $\beta=.28$, $t=2.79$, $p=.006$. To test for mediation, we used bootstrapping procedures which establish a confidence interval for the indirect effect between counterfactual reflection and organizational commitment; mediation is established when the confidence interval does not include zero (Shrout & Bolger, 2002). As hypothesized, feelings of poignancy mediated

the relationship between counterfactual reflection and organizational commitment (95% CI=.24, 2.84; See Figure 2). Thus, thinking about how one's organization might have been different led to greater poignancy, which in turn led to increased organizational commitment.

Finally, participants in the counterfactual reflection condition saw their companies in more positive terms over time, picking one of the two positive trajectories (89%) more than participants in the factual condition (64%), $\chi^2(1, N=97)=8.60, p=.003$.

Study 3: Pitting Counterfactual Reflection Against Prosocial Mission Statements and the Mediating Role of Fate

Study 3 compared the effect of counterfactual reflection on organizational commitment with other factors that have been shown to increase commitment. Grant, Dutton, and Russo (2008), for example, found that employee commitment was enhanced when companies started employee support programs that emphasized how prosocial the company was. To examine whether counterfactual reflection increases organizational commitment even in the face of other effective commitment-boosting strategies (such as prosocial missions), we subtly and orthogonally manipulated the presence of counterfactual origins and prosocial motivations in a hypothetical company's mission statement to determine whether origin type (counterfactual or not) and organization type (prosocial or not) have independent and interactive effects on commitment.

In addition, Study 3 tests whether fate perceptions underlie the effect of counterfactual origins on organizational commitment. We hypothesized that thinking counterfactually would lead to an increased sense that things were meant to be (Kray et al., 2010), which would in turn bolster organizational commitment. We did not, however, have a strong *a priori* prediction for

the relationship between a prosocial mission, perceptions of fate, and organizational commitment.

Study 3 was also designed to rule out an alternative explanation of the previous studies' findings. In Studies 1 and 2, participants generated idiosyncratic counterfactuals about their own countries or organizations. Although such a procedure allows for counterfactual reflection to be personally meaningful, it also creates a situation in which participants in the counterfactual condition may be considering very different types of origins that are differentially personally relevant than factual-condition participants. Thus, in Study 3, rather than have participants generate their own idiosyncratic origins we created and held constant the origin of a company and simply manipulated reflection type.

Method

Participants were 60 undergraduate students (38 women) who were randomly assigned to a 2(Company Type: prosocial, pro-corporate) X 2(Origin of Company: counterfactual, factual) between-subjects factorial design. All participants read about the origin of a fictional company (a computer manufacturer named Halinkray). We embedded an origin story for all participants based on the Fedex story in the introduction: we mentioned that in 1973 Halinkray's founder went to Las Vegas to play blackjack in a successful attempt to save the then floundering company.

The company was described as being either *prosocial* (e.g., "our mission was to give everyone equal access to opportunities") or *pro-corporate* (e.g., "our mission was to be the best computer processing company in the world") and in either *counterfactual* terms (e.g., "I often think back to the very beginning...what if our CEO hadn't gone to the blackjack table...so many events and people would be different if he hadn't taken that bet") or *factual* terms (e.g., "I often

think back to the very beginning, and all the people and events that have been a part of our company's history").

Organizational commitment. To assess organizational commitment, we modified Allen and Meyer's (1990) organizational scale to make it more relevant to the hypothetical nature of our task (four items, $\alpha=.64$, e.g., "I will not feel a strong sense of belonging to this organization" (reverse coded)).

Fate. Our measure of fate was derived from Kray et al. (2010), and contained two items ("If I ended up working here: it would seem meant to be, it would be fated"), $\alpha=.88$.

Results

We conducted a 2(Company Type: prosocial, pro-corporate) X 2(Origin Type: counterfactual, factual) factorial ANOVA on perceived organizational commitment. There was a significant main effect of Company Type; participants expressed more commitment to the prosocial company compared to the pro-corporate company, $F(1,56)=9.67$, $p=.003$, $\eta^2_p=.147$. More importantly, there was a significant main effect of Origin Type; participants expressed more commitment when the company was described in counterfactual terms compared to when it was described in factual terms, $F(1,56)=4.15$, $p=.046$, $\eta^2_p=.069$ (See Figure 3). The interaction between company and origin was not significant, $F < 1$.

To examine the mediating role of fate, we first regressed fate scores on Origin Type (0=factual reflection; 1=counterfactual reflection), and Company Type (0=pro-corporate; 1=prosocial). Results indicated that participants in the counterfactual conditions were significantly more likely to believe that their future involvement with the organization would be 'meant to be' than participants in the factual conditions, $\beta=.30$, $t=2.43$, $p=.018$. There was a marginal effect of prosocial condition on perceptions of fate, with prosocial missions leading to

more fate than pro-corporate ones, $\beta=.23$, $t=1.82$, $p=.074$. We then regressed organizational commitment scores on Origin Type, Company Type, and fate. As hypothesized, when taking into account fate, counterfactual origins were no longer a significant predictor of organizational commitment, $\beta=.09$, $t=.86$, $p=.396$, whereas fate remained a significant predictor, $\beta=.53$, $t=4.91$, $p=.000$. However, fate did not account for the relationship between prosocial missions and organizational commitment, as Company Type was now a stronger predictor, $\beta=.28$, $t=2.69$, $p=.009$. Bootstrapping confirmed that fate mediated the relationship between counterfactual reflection and organizational commitment (95% CI=.08, .64).

Study 3 demonstrated that counterfactual reflection was a significant predictor of organizational commitment, even when controlling for whether or not the hypothetical company had a prosocial mission. Further, the relationship between counterfactual reflection and organizational commitment was mediated by a sense that their connection to the organization was fated and meant to be. This study also has an important practical implication by showing that organizations have a simple and elegant way to increase commitment: they can articulate their origin story to highlight counterfactual possibilities.

Study 4: Counterfactual Reflection and Behavioral Commitment

Study 4 was designed to address two potential limitations inherent in all previous research on counterfactual reflection, including Studies 1-3: assessment of meaning and commitment were measured a) attitudinally and b) immediately after the counterfactual manipulation. Accordingly, in Study 4, we separated the counterfactual manipulation from an assessment of behavioral commitment by a period of two weeks. We asked participants to reflect counterfactually about the origins of their relationships with important business contacts and then two weeks later we assessed whether they had e-mailed their contacts, indicating further

investment in the relationship. We predicted that counterfactual reflection, relative to factual reflection, would increase behavioral commitment to the relationship.

Method

Participants were 40 full-time MBA students (13 women) who participated as part of a classroom exercise on social networks. Participants first listed six people who had contributed significantly to their professional and career development during the past three to four years. They then ranked each of these six business contacts head-to-head.

We contacted participants two days later and asked them to write about how they had gotten to know both the third and fourth-ranked members (to avoid ceiling effects) of their career development network. A within-subjects design was employed, and participants were asked to write about one person in *counterfactual* terms (i.e., “Describe all the possible ways that you might not have met this person and how your connection could have turned out differently”) and the other person in *factual* terms (i.e., “Describe any details about the way you met that determined how your connection occurred”). We counterbalanced whether participants wrote about the 3rd- or 4th-ranked social contact in counterfactual or factual terms. Two weeks after the completion of this writing exercise, we contacted participants and asked them whether or not they had contacted each of their six contacts via e-mail. Of the initial 40 MBA students who completed the first survey, 21 completed this follow-up survey (11 participants wrote about the 3rd-ranked contact in counterfactual terms; 10 wrote about the 3rd-ranked contact in factual terms).

Results & Discussion

We employed the non-parametric Cochran’s Q-test (for two related samples) to assess whether participants were more likely to contact the person about whom they reflected

counterfactually compared to the person about whom they reflected factually. As predicted, counterfactual reflection was associated with a greater likelihood to contact the target person (62%) compared to factual reflection (33%), $Q(1, 21)=4.50, p=.034$. Spending time thinking about how important social connections might not have been a part of one's life led to an increased likelihood of e-mailing that contact up to two weeks later.

General Discussion

The current studies have demonstrated that counterfactual reflection, or thinking about how origins could have turned out differently, can produce increased feelings of commitment and behaviors aimed at strengthening commitment. Regardless of the company, country, or contact and regardless of whether participants were undergraduate or MBA students, reflecting counterfactually on these origins boosted commitment to these entities. Counterfactual reflection even led to increased behavioral commitment two weeks later. Moreover, we showed clear evidence of two underlying processes: both a sense of fate and the experience of poignancy mediated the relationship between counterfactual reflection and increased commitment. These mediators, along with surprise (Koo et al., 2008), all represent a combination of wonder and coherence that counterfactual thinking produces.

We found that when people reflect counterfactually on the past, they tend to think that the future will take on a more positive trajectory. It is possible, though, that there could be negative consequences from having a rosy perception of the future. Counterfactual reflection might lead to a Panglossian vision that causes people to stay too long on a sinking ship. For example, Richard Fuld, the former CEO of Lehman Brothers maintained that the company's future was "destined" because of the numerous ways that Lehman almost didn't survive earlier financial crises (Sorkin, 2009). This overly optimistic commitment to his company led Fuld to refuse low-

priced buy-out offers, ultimately leading – in part – to Lehman’s and the world-wide economy’s collapse.

Conclusion

Longfellow (1863) penned a famous poem about the “midnight ride of Paul Revere”, highlighting that without this ride, America might not be a country today. But his poem also reminds us of another truth. Without recognizing America’s counterfactual roots, its citizens might not be as committed to it as they are. Indeed, in the present research, we have demonstrated that thinking about what might have been, rather than what was, can lead to increased commitment to countries, companies, and social connections. Reflecting on how important institutions might have not come into being can make people feel that their country or company is forever on the “sunrise side of the mountain” and inspire them to commit to an ever-brighter future.

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Table 1. Mean across experimental conditions (counterfactual reflection, factual reflection) in Experiments 1-4. Standard deviations are in parentheses.

	Experiment 1	Experiment 2		Experiment 3		Experiment 4
Dependent Measure	Patriotism	Organizational Commitment	Poignancy	Organizational Commitment	Fate	E-mail Contact
Counterfactual	5.33 (0.77)	4.58 (1.11)	2.13 (2.30)	3.60 (1.01)	2.97 (1.49)	62%
Factual	4.82 (0.85)	4.08 (1.42)	1.13 (1.91)	3.16 (0.91)	2.17 (1.05)	33%

Figure 1. Trajectory diagrams presented to participants in Study 2. The two diagrams on the left represent positive or upward trajectories, the middle diagram represents a neutral trajectory, and the two diagrams on the right represent negative or downward trajectories.

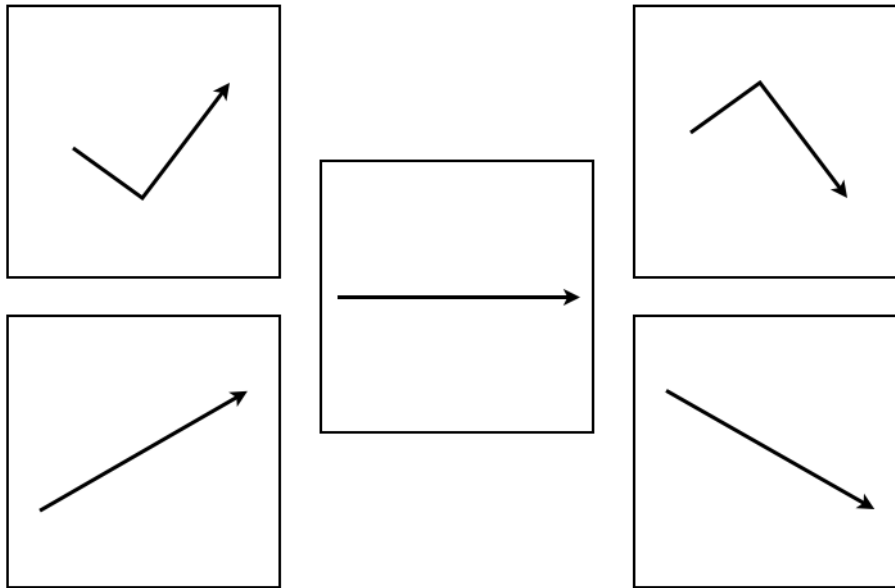


Figure 2. Poignancy mediates the effect of counterfactual reflection on organizational commitment. Numbers represent standardized regression coefficients; numbers in parentheses represent simultaneous regression coefficients.

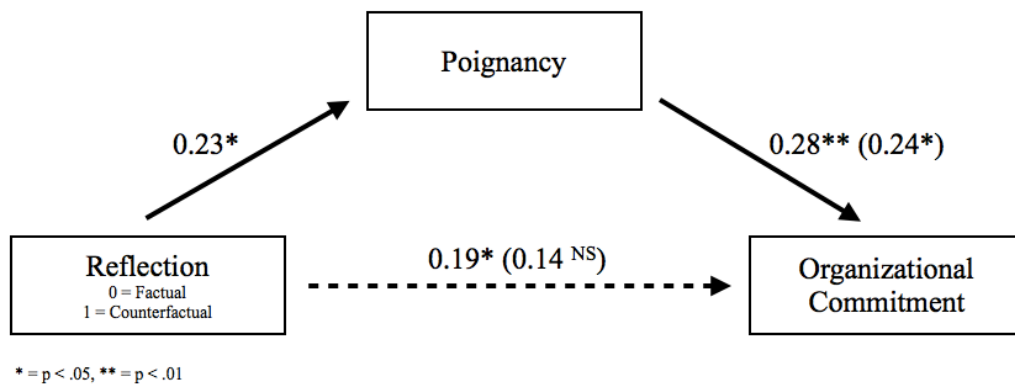


Figure 3. Organizational commitment by Reflection Type and Company Type.

