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Repairing public trust after a crisis

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Background

Trust as a valuable business asset

- Trust is a strategic relational asset for companies (Barney and Hansen, 1994; García-Marzá, 2005; Ingenhoff and Sommer, 2010; Pirson and Malhotra, 2011, Poppo and Schepker, 2010, Ryan and Buchholtz, 2001)
 - higher investor confidence and easier access to capital
 - higher employee commitment and customer satisfaction
 - fewer regulatory burdens, more freedom of action
 - social legitimacy





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Previous work

Crisis communication literature

- Full apology is often considered as the most effective crisis response strategy (e.g., Benoit, 1995; Benoit & Drew, 1997; Kim et al., 2009; but see Coombs and Holladay, 2008)
- Denial is used more often than apology and is the second most frequent strategy after bolstering (Kim et al., 2009)



Previous work

Crisis communication literature

- Most previous experimental studies have investigated the effect of crisis response strategies on a company's *image* or *reputation*, not trust
 - trust is a complex and multifaceted psychological construct with unique dynamics
 - public trust repair is still understudied (Poppo & Schepker, 2010)
- When trust is considered, simplistic models are generally used, that consider *trusting beliefs*, but ignore *willingness to risk* (e.g. DiStaso et al., 2014; Mattila, 2009)



Previous work

Trust-repair literature

- Apology is more effective in cases of competence-based violations, i.e. when unintentional mistakes due to poor skills are made
- Denial is more effective after integrity-based violations, i.e. when intentional violations of social norms are committed

(e.g. Kim et al., 2004; Ferrin et al. 2007; Kim & Harmon, 2014)



What about *benevolence*?

- Benevolence is “the perception of a positive orientation of the trustee toward the trustor” (Mayer et al., 1995: 719)
 - ~ care / goodwill
- “While [benevolence] is arguably important for an intimate stakeholder group, such as employees (Gillespie and Dietz, 2009), it is less likely to be a focal aspect of public trust.” (Poppo and Schepker, 2010: 127)
 - benevolence is a key dimension of company-stakeholder trust relations (Fuoli and Paradis, 2014)



Research questions

1. Is apology more effective than denial in repairing public trust in a company after an alleged violation?
2. Does the type of violation (i.e. ability, benevolence or integrity) affect the comparative effectiveness of apology and denial strategies?
3. Which type of violation leads to the greatest loss of trust?



Experiment design

- **3** (trust-violation type: ability, benevolence, integrity) **x 2** (trust-repair strategy: apology vs. denial) between-subjects design

	Ability	Benevolence	Integrity
Apology	AB_apo	BN_apo	IN_apo
Denial	AB_den	BN_den	IN_den



Procedure

1. Participants read two fabricated newspaper articles reporting on a chemical spill at a plant operated by a fictitious multinational chemical company
 - the first article reports on the accident and includes the manipulations of trust-violation type
 - the second article includes the manipulations of response type
2. Participants complete a questionnaire that is designed to measure their level of trust in the company responsible for the accident
3. The individual trust scores are compared across conditions



Thousands without water after spill in Shreveport

Incore Chemicals accused of making mistakes during safety inspection

By SHIRLEY MORELL

Staff writer

SHREVEPORT - More than 100,000 people were without safe tap water on Monday after nearly 2,000 gallons of ammonia spilled from a fertilizer factory operated by the multinational chemical company Incore Chemicals into the Red River near Shreveport, Louisiana, officials said.

Health authorities warned residents in seven Shreveport-area counties not to drink, bathe, cook or wash clothes in the water until further notice.

Exposure to ammonia can cause headaches, nausea and irritation to eyes, nose and throat. No casualties have been reported so far, but health officials remain on high alert. Even though the spill has been contained, it could take up to four weeks before the water quality is back to normal.

An investigation has been launched to determine the



INCORE CHEMICALS' factory on the Red River near Shreveport, LA. The storage tanks that contained the ammonia that leaked into the river appear on the left-hand side.

cause of the accident. Preliminary reports suggest that the spill was triggered by the sudden collapse of a pipe that carried the ammonia from the storage tanks to the production facility.

According to Incore Chemical's records, the plant had recently

been inspected by a team of engineers and was deemed safe. However, a panel of experts appointed by local authorities have found inconsistencies in the company's safety inspection report. According to Douglas Stiller, head of the panel, these

inconsistencies seem to suggest that the inspection was not properly conducted, and that signs of an imminent collapse of the pipe might have been accidentally overlooked.

Local police officer Kevin Turner warned that the investigation is at a preliminary stage, and that more work is needed to determine the exact cause of the spill, as well as civil or criminal responsibilities. However, according to Ollie Tyler, mayor of Shreveport, these allegations raise "serious questions" over Incore Chemicals' technical competence and ability to operate the plant safely.

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Breaking news

Incore Chemicals apologizes for mistakes during safety inspection

By Francis Bowman

SHREVEPORT - In an official statement released today, Incore Chemicals has responded to allegations of inaccurate safety records after the chemical spill that left thousands without safe tap water near one of the company's plants in Shreveport, Louisiana, last Monday.

Incore Chemicals has admitted that its staff made mistakes during the last safety inspection at the company's plant in Shreveport, and failed to detect heavy corrosion on the pipe that collapsed, causing the spill. The company has apologized for this "unfortunate oversight", and promised that a similar accident will not happen again in the future.

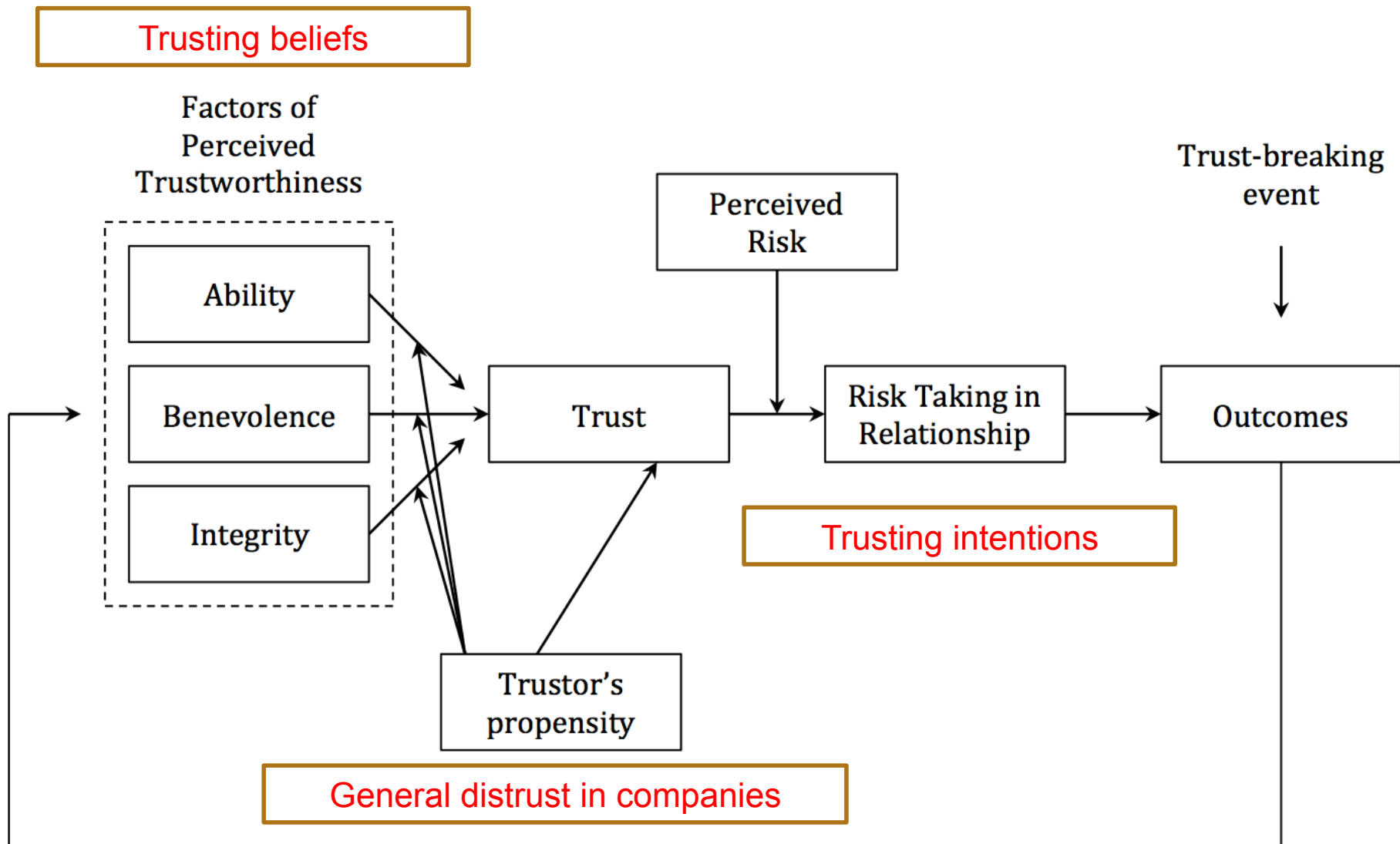
Full article

Measures

- Perceived ability (3 items) ¹
 - Perceived benevolence (3 items) ²
 - Perceived integrity (3 items) ¹
 - Willingness to risk (4 items) ¹
 - Willingness to be vulnerable (4 items) ³
 - General distrust in companies (5 items) ⁴
- Trusting beliefs
- Trusting intentions
- Individual propensity to trust

1. Adapted from Kim et al. (2004)
2. Adapted from Mayer and Davis (1999)
3. Created anew
4. Adapted from Adams et al. (2010)





Adapted from Mayer et al. (1995)



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Pilot study

Participants

- 125 students
- Mean age: 24.71
- Nationality
 - Swedish: 95
 - British: 4
 - American: 3
 - Canadian: 3
 - (Other) :19
- Gender:
 - Female: 82
 - Male: 43



Results



Reliability

Internal consistency

- Perceived ability: 0.76
- Perceived benevolence: 0.77
- Perceived integrity: 0.80
- Willingness to risk: 0.66
- Willingness to be vulnerable: 0.75
- General distrust in companies: 0.92

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent (High-Stakes testing)
$0.7 \leq \alpha < 0.9$	Good (Low-Stakes testing)
$0.6 \leq \alpha < 0.7$	Acceptable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable



Reliability

Manipulation checks

- Manipulation check question 1: 60% correct
- Manipulation check question 2: 57% correct
- Manipulation check question 3: 77% correct



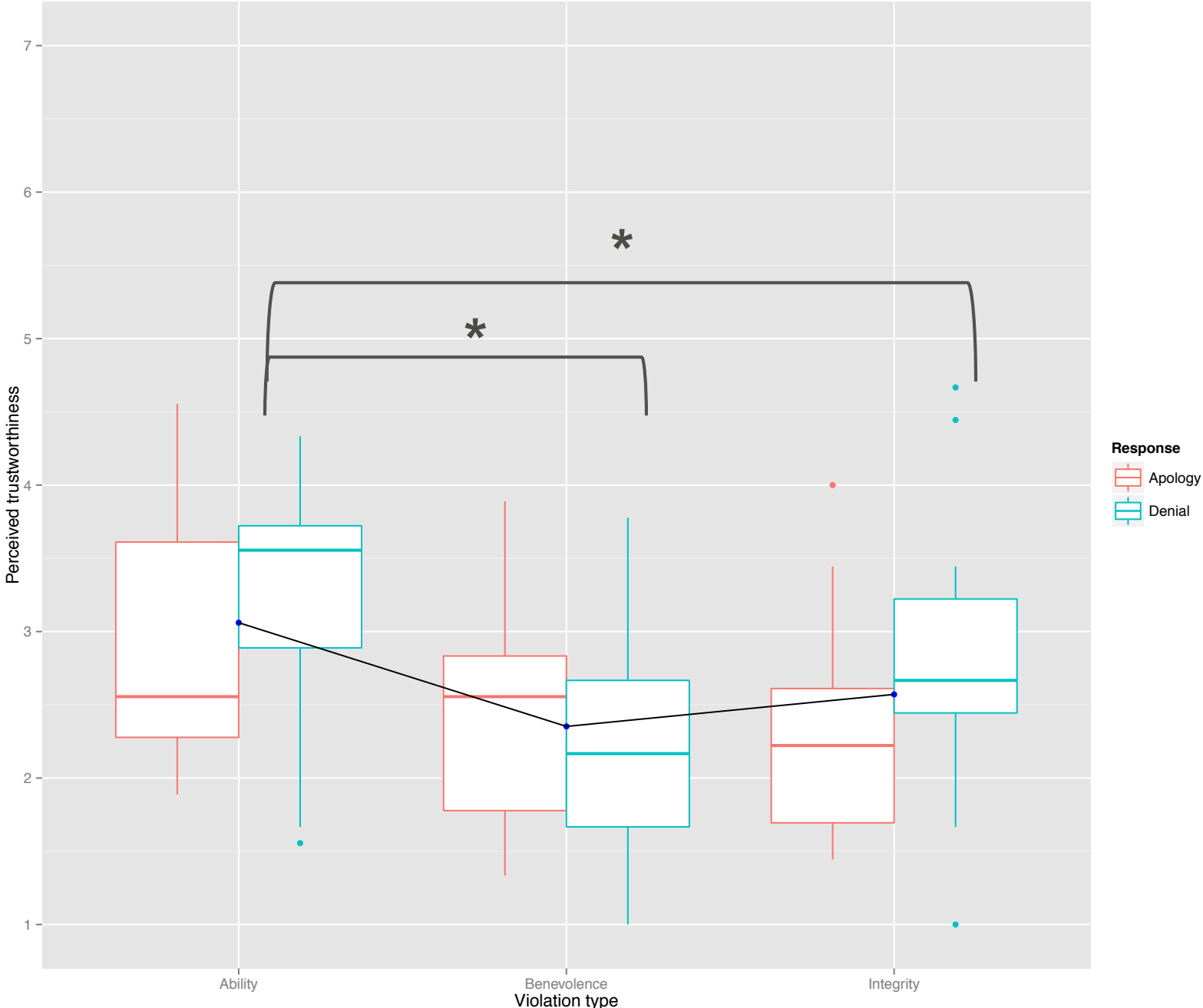
Reliability

Manipulation checks – pilot subset

- Manipulation check question 1: 66% correct
- Manipulation check question 2: 64% correct
- Manipulation check question 3: 100% correct



Perceived trustworthiness



Call:

```
lm(formula = tr.bel ~ Violation + Response + dist, data = data)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-1.65830	-0.54927	-0.06151	0.55751	1.94671

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	3.7043	0.3225	11.487	< 2e-16	***
ViolationBenevolence	-0.6863	0.2036	-3.370	0.00110	**
ViolationIntegrity	-0.5681	0.1942	-2.925	0.00433	**
ResponseDenial	0.2003	0.1647	1.216	0.22708	
dist	-0.1542	0.0587	-2.626	0.01011	*

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7984 on 93 degrees of freedom

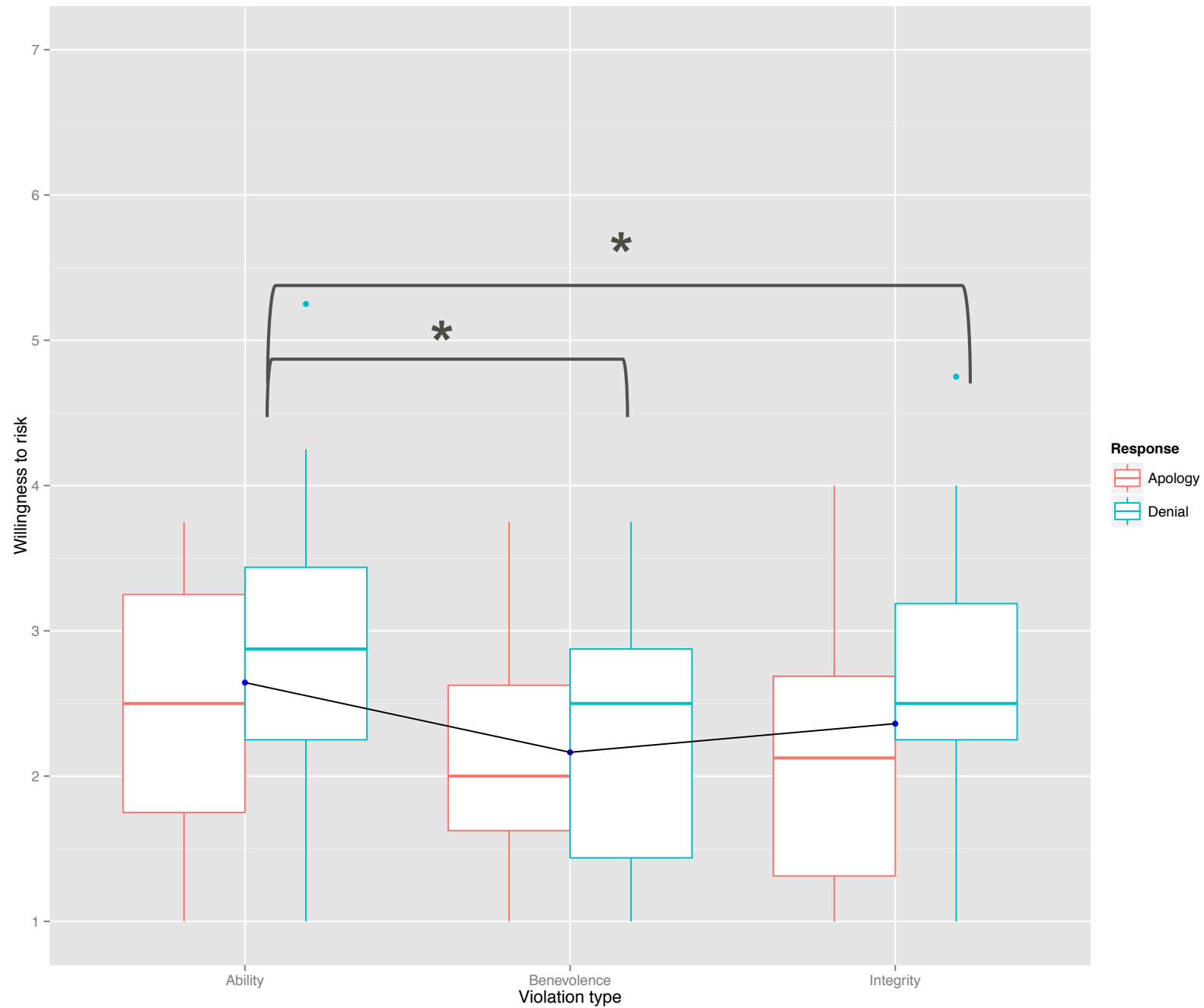
Multiple R-squared: 0.1907, Adjusted R-squared: 0.1559

F-statistic: 5.478 on 4 and 93 DF, p-value: 0.0005267

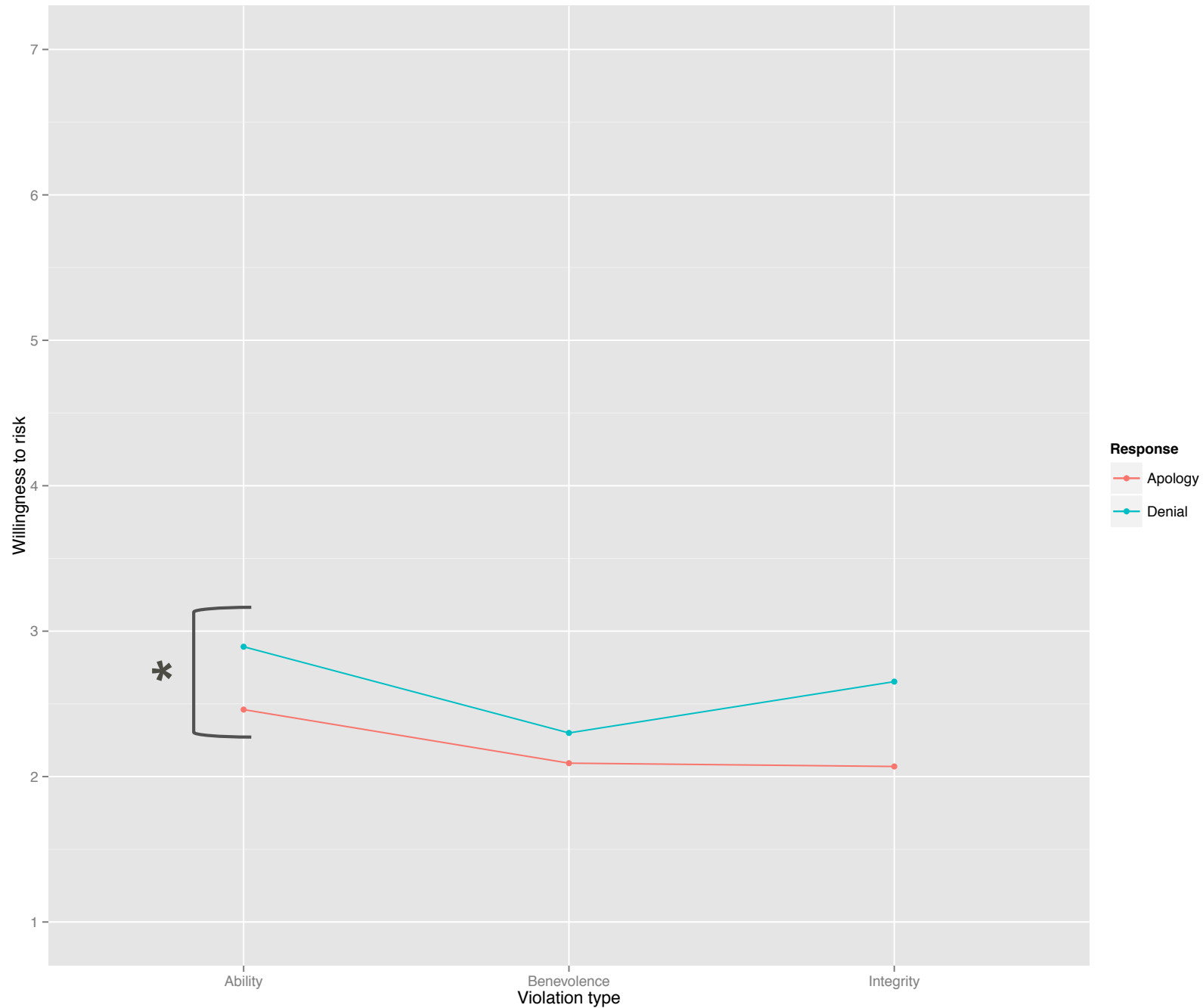


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Willingness to risk



Willingness to risk



Call:

```
lm(formula = tr.int ~ Violation + Response + dist, data = data)
```

Residuals:

Min	1Q	Median	3Q	Max
-1.6213	-0.5213	-0.1100	0.4972	1.9091

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	3.80829	0.33025	11.531	< 2e-16	***
ViolationBenevolence	-0.43995	0.20857	-2.109	0.0376	*
ViolationIntegrity	-0.42580	0.19891	-2.141	0.0349	*
ResponseDenial	0.37151	0.16871	2.202	0.0301	*
dist	-0.27965	0.06012	-4.651	1.09e-05	***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.8177 on 93 degrees of freedom

Multiple R-squared: 0.265, Adjusted R-squared: 0.2334

F-statistic: 8.382 on 4 and 93 DF, p-value: 8.073e-06



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Summary of preliminary findings

1. Is apology more effective than denial in repairing public trust in a company after an alleged violation?
 - a. Denial is more effective in repairing people's trusting intentions
 - b. No difference in repairing people's trusting beliefs
2. Does the type of violation (i.e. ability, benevolence or integrity) affect the comparative effectiveness of apology and denial strategies?
 - a. No, denial is more effective across the board, at least regarding trusting intentions
3. Which type of violation leads to the greatest loss of trust?
 - a. Benevolence violations



Main limitations

- Comprehension check questions
- Fairly low alpha scores on 'willingness to risk' scale
- Inconsistent results from 'willingness to be vulnerable scale'





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