

Repair or Replace: Consumer's Response When Products Break

PRESENTER: **Nathan Allred**

Product Repair is a method for curbing resource consumption

- The default choice (Huh, Vosgerau, and Morewedge 2014) when a product breaks is replacement
- Product replacement increases the amount of resources that are consumed when compared to product repair
- Companies are increasingly offering repair services, which provide customers with a low-effort (Thaler and Sunstein 2008) alternative to product replacement

Hypotheses

H1: Repair Services decrease consumers' likelihood to replace a broken product.

H2: Perceived effort will mediate the effect of repair services on replacement likelihood.

H3: Frugality will moderate the effect of a repair service on replacement likelihood. Specifically, when an individual is less frugal, the effect of a repair service on replacement likelihood will be attenuated.

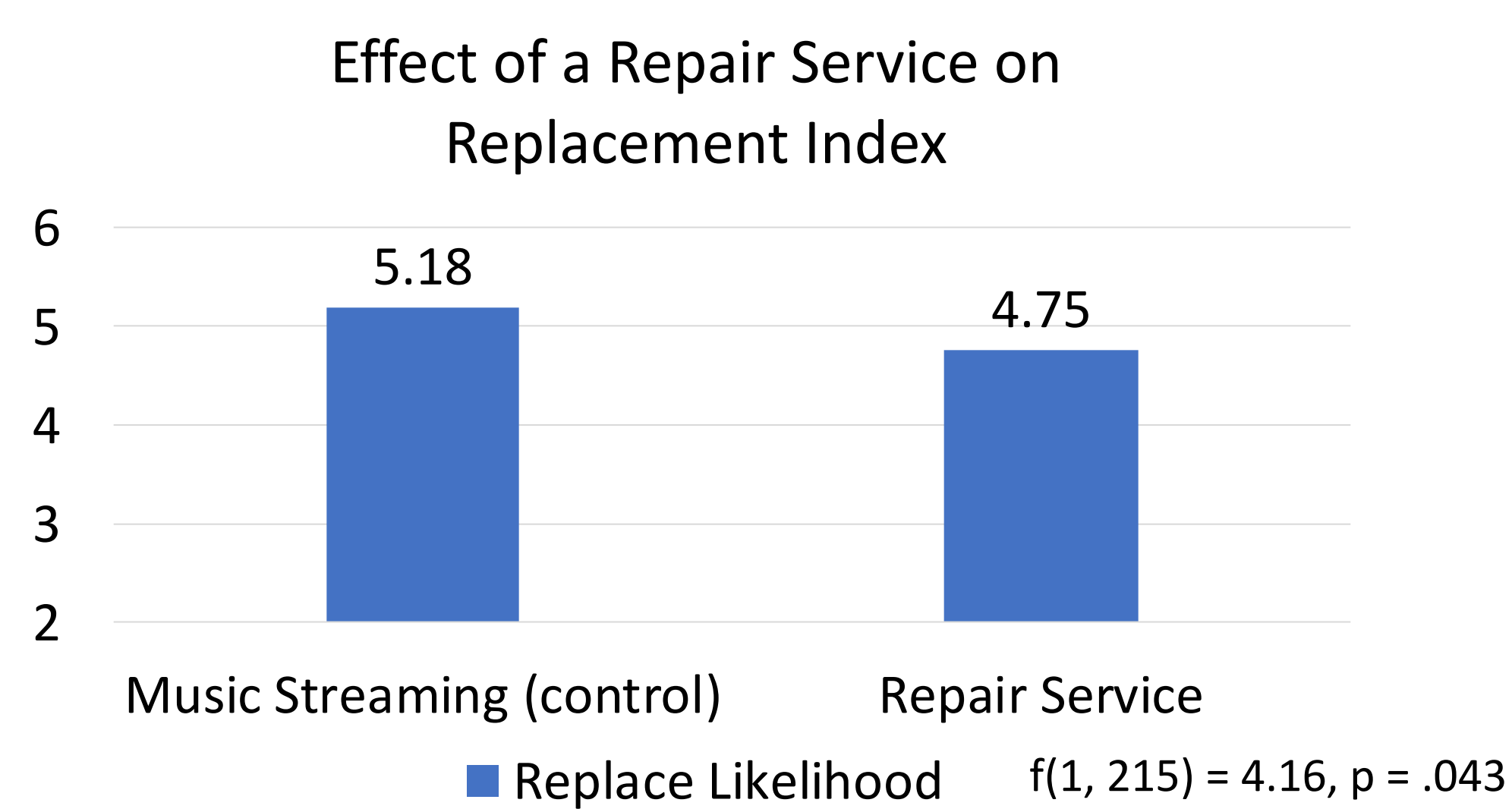
Study 1

Purpose: Test H1, show the main effect of repair service on replacement likelihood

Method

- N = 226 Mturkers
- Design: Between subjects 2 (repair service: yes, no) x 2 (warranty: yes, no)
- Stimulus: Headphones
- Replacement Likelihood. M = 4.93, SD = 1.39

Results



Summary

- Provides support for H1
- No effect of warranty on replacement likelihood $f(215) = .77, p = .382$

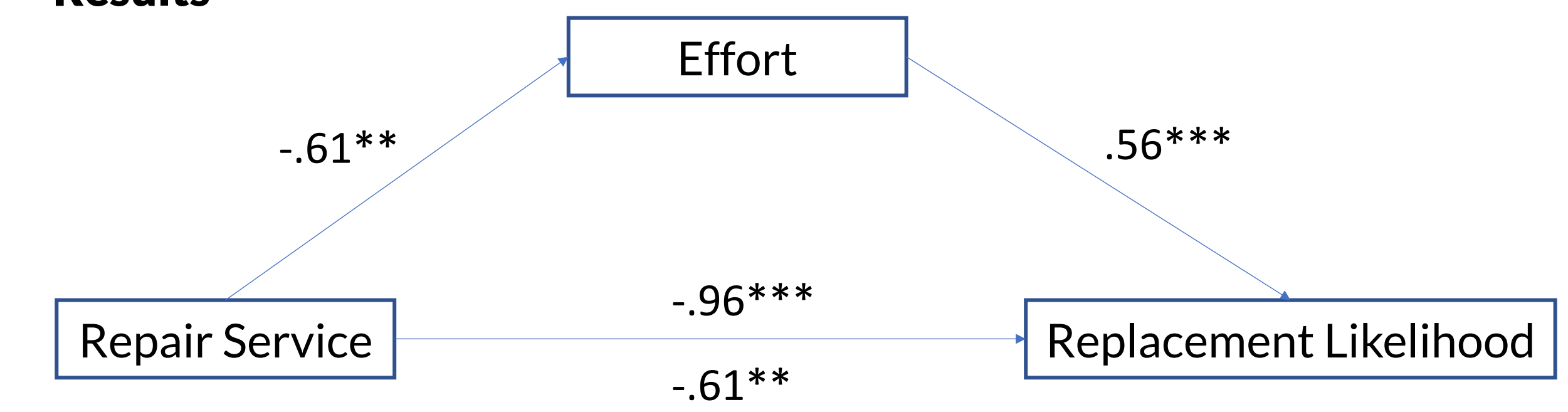
Study 2

Purpose: Test H2, provide evidence for effort as the driving factor behind the repair service effect, and rule out quality as an alternative explanation.

Method

- N = 212 Mturkers
- Design: Two-cell design (repair service: yes, no)
- Stimulus: Headphones
- Replacement Index. Three-item measure $\alpha = .83, M = 4.20, SD = 2.10$
- Effort. Three-item measure (adapted from Bechwati and Xia 2003) $\alpha = .70, M = 4.21, SD = 1.47$
- Perceived Quality. Five-item measure (adapted from Purohit and Srivastava 2001) $\alpha = .79, M = 5.41, SD = 1.06$

Results



Indirect Effect: $\beta = -.35, CI [-.64, -.11]$

note. * $p < .05, **p < .01, ***p < .001$

Summary

- Effort partially mediates the repair service effect
- Perceived quality did not mediate the repair service effect (Indirect Effect: $\beta = .04, CI [-.14, .24]$)

Repair Services decrease a consumer's likelihood to replace a broken product, by decreasing the amount of effort required of the consumer to make a repair.

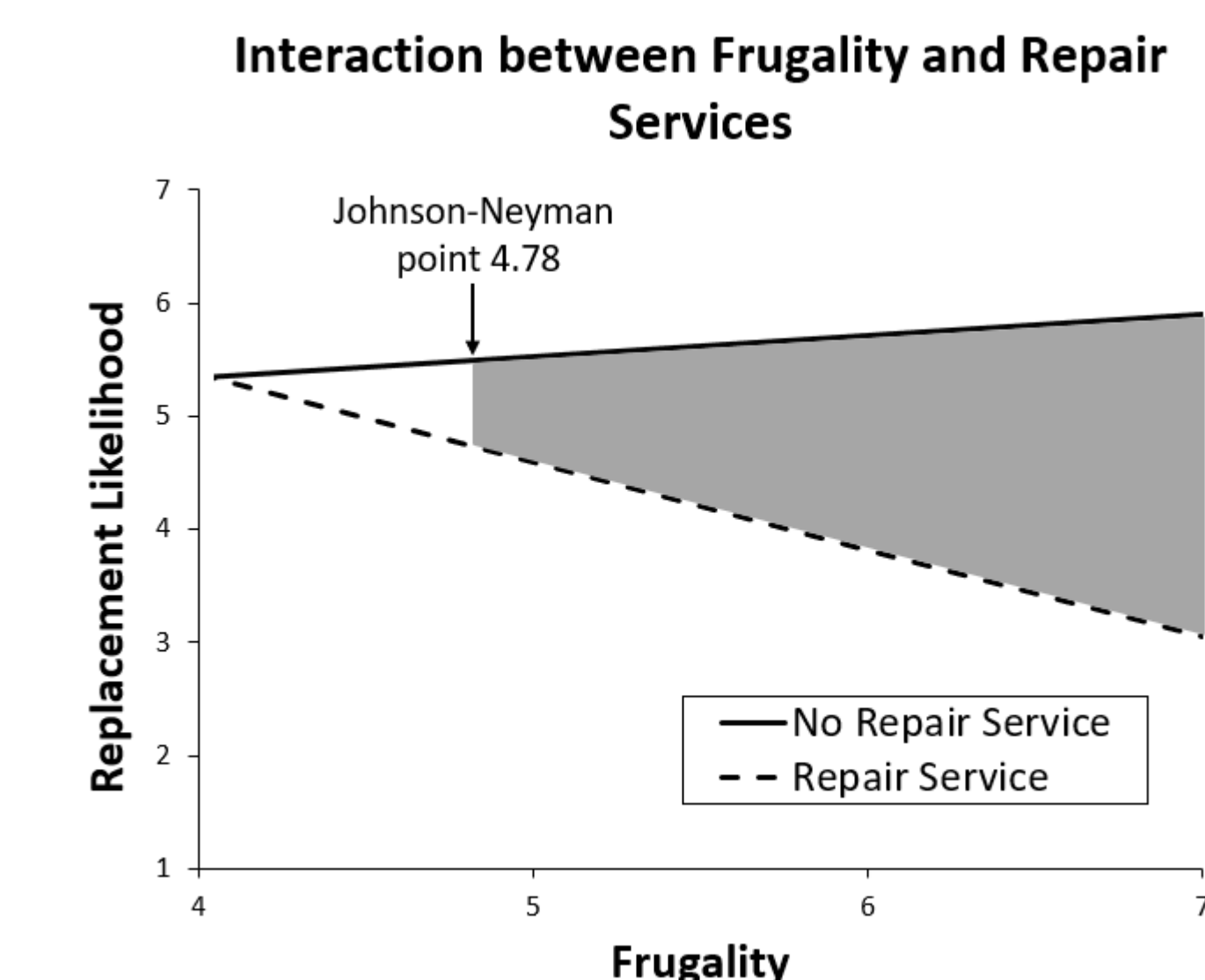
Study 3

Purpose: Test H3, show moderation of process, and test the repair service effect in a different product category.

Method

- N = 466 Mturkers
- Design: Between-subjects 2 (repair service: yes, no) x 3 (effort: high, low, control)
- Stimulus: Toaster
- Replacement Index. Three-item measure $\alpha = .84, M = 4.90, SD = 2.23$
- Frugality. Eight-item frugality measure (adapted from Lastovicka, Bettencourt, Hughner and Kuntze 1999) $\alpha = .81, M = 5.91, SD = .76$

Results



Summary

- Provided experimental evidence for effort as the mediating factor (Spencer et al. 2005)
- Frugality moderates the repair service effect $f(1, 409) = 12.89, p < .001$

Stimuli

Introducing the Apollo 920



News articles were created that described the services provided by the hypothetical company (repair service or music streaming service), which was determined based on which condition the participant was in.

Consumer and Managerial Implications

- Repair effort prevents consumers from participating in sustainable consumption by making product repairs less desirable.
- By offering repair services, companies can decrease the effort required of a consumer to repair a broken product, thus decreasing consumption from product replacement.
- Repair Services have the potential of increasing customer retention by providing a convenient way for customers to prolong the life of a product.

Limitations and Future Research

- The current research fails to capture real behavior
 - Field study with a local clothing store
- The current research did not investigate what product traits affect replacement likelihood
 - Run study that manipulates product traits such as "Broken in"
- Downstream firm outcomes were not captured in this project
 - Investigate how repair services effect customer satisfaction and brand loyalty

Nathan Allred and Karen Winterich



PennState
Smeal College
of Business