



Imitation behavior of junior auditors: Does it enhance or hamper audit quality?

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Background

- Audit standard setters and regulators highlight the importance of providing appropriate on-the-job training and coaching for **junior auditors** by more **senior auditors** (e.g., IAASB 2014)
- Senior auditors play an important role in **knowledge transfers** towards junior auditors (e.g., Andioli et al. 2019; Bol et al. 2018; Cannon 2016; DeFond and Zhang 2014; Emby et al. 2019; Francis 2011; Howieson et al. 2014; Westermann et al. 2015)
 - audit senior provides a **role model** for the juniors to follow
= “an experienced guide [who] shows the learner (audit junior staff) how to perform a task.”
(Westermann et al. 2015, p. 864)



Research Questions

- Whether and When do junior auditors imitate their superior?
→ Determinants of imitation behavior
- How does this affect audit quality?
→ Consequences of imitation behavior

Research Questions

- Imitation may be beneficial when following a “good” example, but ... it could also be *problematic* when following a “bad” example

A role model is somebody you look at and you say, “Boy, this person ... is really good at this. Boy, I am just going to copy that behavior and emulate that behavior.” Or, it could be, “God, ... is terrible at doing this. I am never going to do that.” So that is the role model, positively and negatively. (E04, Manufacturing)

[source: Westermann et al. 2015, p. 876]

- Is there indeed **selective** imitation? i.e. do junior auditors blindly follow their superior, or do they consider their superior’s working style carefully?
- Does this **depend** on the nature of the promotion system? i.e. are junior auditors more prone to imitate when their superior has high reward power?

Imitation theory

- Imitation = emulation of salient role models
- **Learning perspective:**
 - Based on observing a particular role model (e.g., Bandura 1977; Manz and Sims 1981, Weiss 1977)
 - Juniors learning auditing through observing the example of a senior auditor
 - Selective imitation
 - i.e., imitating “good” vs. “bad” role model
- **Strategic perspective:**
 - Driven by reward power of the role model (e.g., Weiss 1977)
 - Juniors following the example set by a senior auditor who is their performance supervisor and rater
 - Strategic imitation

Effect on junior auditor's imitation: the superior's working style and the promotion system

- **Learning perspective:** Working style of the superior
 - High diligent vs low diligent
 - Stronger imitation of high diligent superior
 - **Strategic perspective:** Incentive via promotion systems
 - Superior-based vs consensus-based
 - Stronger imitation under superior-based
- Professional skepticism (e.g., IAASB 2018; IAESB 2018)
- Broad accountability and Judgment justifiability (e.g., Gibbins and Newton 1994; Koonce et al. 1995; Kadous et al. 2013; Tan and Shankar 2010; Peecher et al. 2013)



Effect on junior auditor's **imitation**: the superior's working style and the promotion system

→ Junior auditors who are exposed to a high diligent superior will respond positively to promotion incentives, resulting in higher levels of imitation, whereas junior auditors facing a low diligent superior will be less likely to do so.

H1: Junior auditor imitation is **higher (lower)** when a junior auditor faces a **high (low)** diligent superior and operates under a superior-based promotion system rather than under a consensus-based promotion system.

Effect on junior auditor's **audit quality**: the superior's working style and the promotion system

→ Experienced auditors who possess higher (lower) knowledge provide the juniors with richer (less) opportunities to develop their knowledge, leading to **higher (lower) audit quality** (e.g., Bol et al. 2018; DeFond and Zhang 2014; Francis 2011; Howieson et al. 2014; Westermann et al. 2015)

H2: Audit quality will be **higher (lower)** when a junior auditor faces a **high (low)** diligent superior and operates under a superior-based promotion system rather than under a consensus-based promotion system.

Exploration: effects of junior auditor's imitation on audit quality

- Intuitively, imitating:
 - high diligent auditor → positive impact on audit quality
 - low diligent auditor → negative impact on audit quality

BUT!

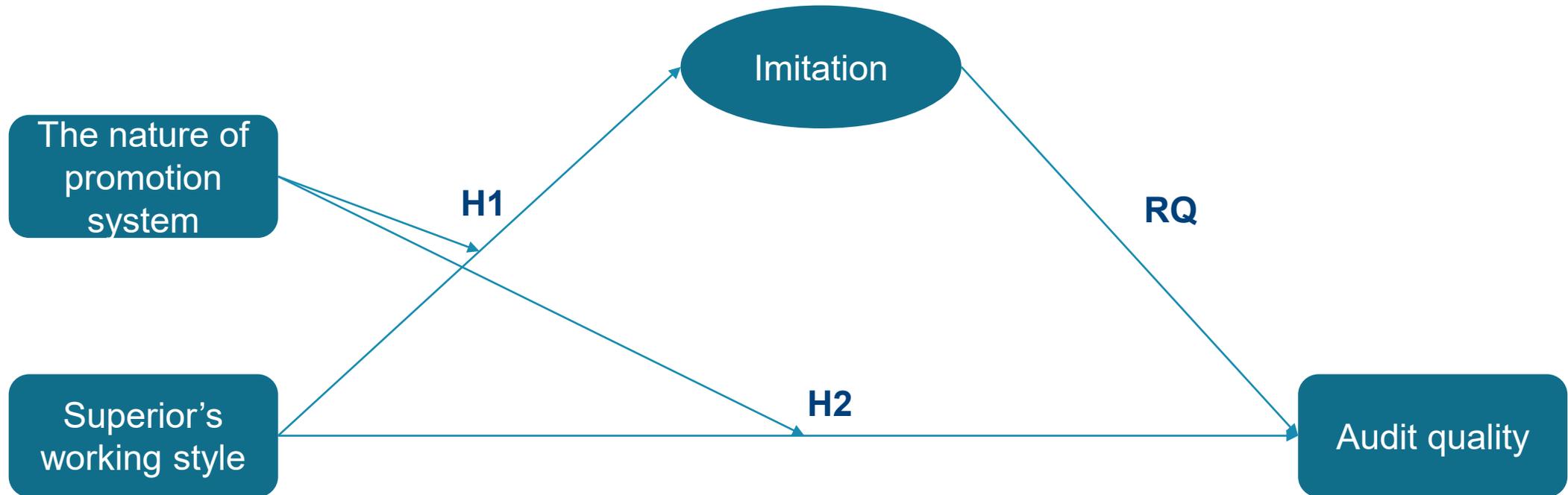
Does imitating high diligent auditor always result in improved judgment and better audit quality?

- Idiosyncratic characteristic of every audit engagement (e.g., Griffith et al. 2015; Knechel et al. 2013)
- The danger of exact copying in complex environments (e.g., Csaszar and Siggelkow 2010)



RQ: Does audit quality enhance or deteriorate with higher level of imitation?

Theoretical model



Experiment – Participants & Procedures

Junior Auditors – Mimic lab setting (via envelope procedure)

- Recruited at in-house training days from two big four firms (via the help of FAR)
- In total 143 participants agreed to participate by giving their consent. Final sample is n=138 (4 failed the crucial manipulation check, 1 participant had many incomplete responses).

Representative sample of Junior Auditors (n=138)

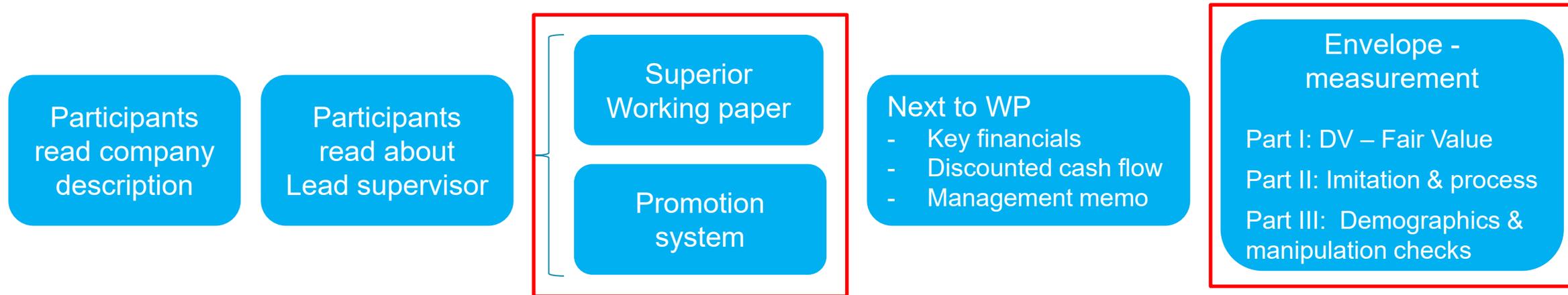
- Average age 26.99.
- 65.94% Male (rest Female).
- About 96.34 % of participants have less than 6 years of work experience, with the majority of them having between 3-4 years of experience (63.76%).



Experiment – Case

Task – Complex Audit Estimates (Kadous and Zhou 2019; Griffith et al. 2014)

- ❑ Participants assessed whether impairment was needed for “Hybrid Division” of probe IT (electric cars)
- ❑ Seeded cues in case that the fair value estimate by management was likely overstated
- ❑ Case validated on basis of interview with senior auditor at big four firm
- ❑ Imitation: direct lead superior “John Van Wijk” who shared working paper for other BU “Pure Electric”



Experiment – Manipulation (2 x 2 between subjects)

Working paper of High-Diligent vs. Low-Diligent lead supervisor (for other BU)

High diligent:

- ❑ John = who performed his tasks very carefully, critically examined available evidence, and strove to gather sufficient support before reaching his conclusions.
- ❑ working paper of Pure Electric SBU depicted more thorough steps and detailed analysis, which eventually led to the conclusion that a goodwill impairment was required for the pure electric division.

Low diligent:

- ❑ John = superior well-known for his capability to keep engagement within budget, worked very efficiently, with quick, decisive action in completing his tasks.
- ❑ Audit procedures omitted steps under ISA 540. It excluded the evaluation of the assumption of the discount rate and taxation rate in management valuation analysis. Also less extensive testing was done for projected revenues. Many other steps were not done very meticulously; conclusion was no overstatement.

Nature of promotion system – Superior-based promotion vs. consensus-based promotion (participants are aware of promotion opportunity; engagement constitutes opportunity to demonstrate skill)

Superior based promotion:

“As part of your review process, you know that a promotion is determined on the basis of an assessment of a performance review. Given that you have been repeatedly matched with your superior John, his voice will have a decisive impact on the eventual decision”.

Consensus based promotion:

“As part of your review process, you know that a promotion is determined on the basis of a consensus on your performance in the review committee. Note that the review committee consists of multiple superiors, of which the superior in the current engagement is only one.”.

Experiment – Key variables

Audit Quality – Fair value estimate (Kadous and Zhou 2019; Griffith et al. 2014)

- ❑ Reverse coded item - “How likely is it that Hybrid’s current FVE of EUR 3.2 billion is fairly stated?” (1-10 scale)

Imitation (Williams 2007, Reusen and Stouthuysen 2017; McFarland et al. 2008)
 $\alpha=0.86$ (all items on 1 to 10 scale)

- ❑ “To what extent did you adopt your superior’s approach related to the audit of the “Pure Electric” SBU for auditing the FVE of the “Hybrid” SBU?” (sup_adopt)”
- ❑ “To what extent did you align with the working style of John Van Wijck to audit the FVE of the “Hybrid” SBU?” (sup_align)
- ❑ “To what extent would your audit opinion be based on similar procedures described in John’s working paper?” (sup_similar)



Results Imitation – Hypothesis 1

DV: Imitation

			High Diligent	Low Diligent
Superior-based Promotion	Imitation	Mean (St. dev) N	6.8382 (1.1724) N=34	4.9314 (1.3945) N=34
	Imitation_FS	Mean factor scores (St. dev factor scores)	-0.3755 (0.9678)	-2.2254 (1.2111)
Consensus-based Promotion	Imitation	Mean (St. dev) N	6.3000 (1.6700) N=35	5.2429 (1.5045) N=35
	Imitation_FS	Mean factor scores (St. dev factor scores)	-0.8364 (1.3746)	-1.8743 (1.2577)

ANOVA:

- Main effect of superior style ($p < 0.01$)
- Interaction of superior style x nature of promotion ($p = 0.0515$)

Simple effects:

- Weak effect of promotion when facing high diligent superior ($p = 0.1171$)
- Strong effect of superior type ($p < 0.01$), Effect size bigger in superior based promotion

CONSISTENT WITH H1:

Junior auditors imitate the “good” guy more; more pronounced under superior based promotion

Results Audit Quality – Hypothesis 2

DV: Audit Quality (FVE)

		High Diligent	Low Diligent
Superior-based Promotion	Mean (St. dev) N	6.3382 (1.7526) N=34	5.7647 (1.9394) N=34
Consensus-based Promotion	Mean (St. dev) N	5.8857 (2.0367) N=35	5.2857 (1.5401) N=35

ANOVA

- Effect of Superior Type on AQ ($p=0.061$)
- Effect of Promotion on AQ ($p=0.1366$)
- No interaction on AQ ($p=0.9961$)
- Highest quality: High diligent & superior based promotion (contrast, $p=0.057$)

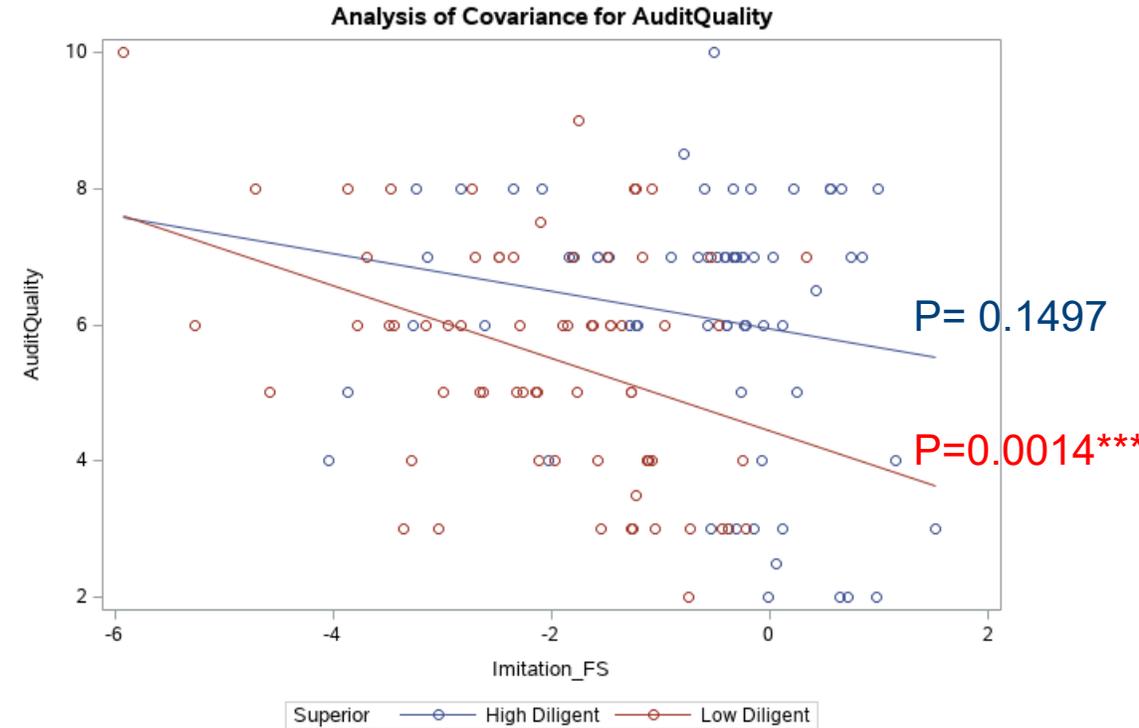
We do not find evidence in support of H2, yet we show that:

- Junior auditors perform better when facing a diligent superior
- Highest quality is still observed when facing diligent superior under superior based promotion

Research Question – Imitation to Audit Quality

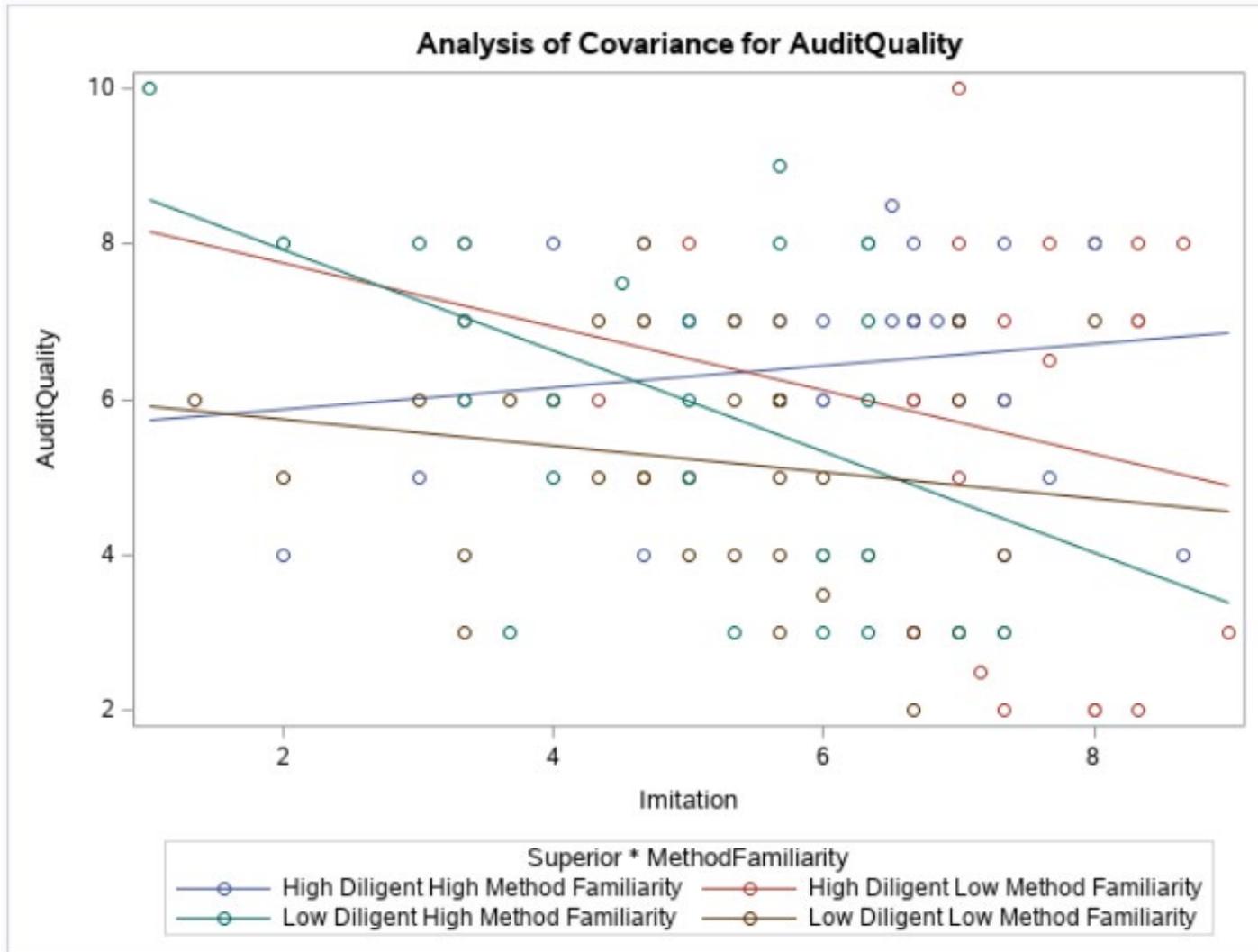
IV: Imitation, controlling for direct effect of superior
DV: Audit Quality

Source	DF	Mean Square	F-value	p-value
Imitation_FS	1	33.2254	10.66	0.0014***
Superior	1	31.2214	10.02	0.0019***
Superior * Imitation_FS	1	3.3276	1.07	0.3033
Error	134	3.3430	-	-



Imitation does not improve audit quality; it seems to deteriorate it, in particular when facing low diligent auditor, audit quality is negatively affected through imitation

Post-hoc analysis: Junior auditor's method familiarity (I)



ANOVA on Audit Quality

Superior x Imitation_FS x Method_familiarity is significant ($p=0.083$).

Positive effect of imitating the “good” guy (Superior x Imitation_FS) depends on Method Familiarity (BLUE LINE)

Junior auditor's method familiarity seems to be important for imitation to have positive effects !

Post-hoc analysis: Junior auditor's method familiarity (II)

			High Diligent	Low Diligent
High Method Familiarity	Imitation	Mean (St. dev) N	6.1952 (1.4772) N=35	4.9821 (1.5558) N=28
	Imitation_FS	Mean factor scores (St. dev of factor scores)	-0.9140 (1.2060) {1}	-2.1454 (1.3549) {-2}
	Low Method Familiarity	Imitation	Mean (St. dev) N	6.9461 (1.3625) N=34
	Imitation_FS	Mean factor scores (St. dev of factor scores)	-0.2956 (1.1384) {3}	-1.9803 (1.1651) {-2}

Junior auditors who are familiar do not blindly follow the “good auditor”. *MethodFamiliarity* is significant when facing the high diligent auditor ($F=4.51$, $p=0.0356$).

Audit Quality

		High Diligent	Low Diligent
High Method Familiarity	Mean (St. dev) N	6.4714 (1.3770) N=35	5.9821 (2.0927) N=28
		{3}	{-1}
	Low Method Familiarity	Mean (St. dev) N	5.7353 (2.2838) N=34
		{-1}	{-1}

Contrast analysis shows that audit quality is significantly higher in the cell where junior auditors face a high diligent superior and have high method familiarity compared to the three other cells ($F=14.21$, $p=0.0002$).

Discussion and Conclusion

□ First to explore the role of imitation behavior in the context of a professional audit firm.

- Good news: Juniors imitate the high diligent auditor more strongly, in particular under high incentives.
- Bad news: Imitation does not improve Audit Quality; it deteriorates it, when juniors face a low diligent senior.
- POST-HOC analysis: TRAINING, getting PEOPLE FAMILIAR with the method, reduces “blindly” following.
For Juniors familiar with the method, imitation of the high diligent auditor renders positive effects on AQ

□ Implications for Audit Firms

- Practice of sharing working papers – best practices of “diligent” working styles can help
- Superior based promotion is not so bad after all – if combined with diligent senior (highest effect here)
- Imitation does not always improve audit quality in complex audit matters;
 - Practice of sharing working papers needs to be supplemented with direct coaching and training
 - Sharing best practice of several colleagues to reduce blind following
 - Method workshops, discussing important cases may improve familiarity

Thank
You

