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SERVING TWO MASTERS: THE EFFECTS OF REPORTING LINE AND MANAGEMENT TRAINING GROUND ON INTERNAL AUDITORS’ JUDGMENTS

ABSTRACT

In this study, eighty-eight experienced internal auditors from the gaming industry participated in an experiment designed to investigate two factors that may affect internal auditors' objectivity: (1) the internal audit function's (IAF) reporting line when performing consulting services (i.e., the IAF reports to management or the audit committee) and (2) whether or not the IAF is used as a management training ground (MTG). The participants completed a case wherein they were asked to evaluate business risks associated with a major gaming investment and to make a final recommendation. The results include three interesting findings. First, the internal auditors' risk assessments reveal an interaction effect between reporting line and MTG. When the IAF is not used as a MTG, internal auditors' risks assessments do not significantly differ when the IAF reports to senior management versus the audit committee. However, when the IAF is used as a MTG, internal auditors' risk assessments are significantly lower when the IAF reports to senior management versus the audit committee. Second, the internal auditors' recommendations show that they provided more favorable recommendations regarding the investment to the audit committee than to management. Third, when the IAF is used as a MTG, the internal auditors provide more favorable recommendations than when the IAF is not a MTG. Overall our results highlight the interplay between reporting lines and whether or not the IAF is being used as a MTG on internal auditors’ objectivity.

Keywords: Internal auditors, internal audit function, objectivity, management training ground.

Data Availability: Data are available from the authors upon request.
SERVING TWO MASTERS: THE EFFECTS OF REPORTING LINE AND MANAGEMENT TRAINING GROUND ON INTERNAL AUDITORS’ JUDGMENTS

I. INTRODUCTION

Objective judgments by internal auditors represent a precondition for the internal audit function’s (IAF) contribution to high quality corporate governance (PCAOB 2007; IIA 2011, 2012). As internal auditors expand their role in governance and risk-management activities, additional challenges are present for maintaining the requisite independence and objectivity (IIA 2011, 2). In this study, we employ eighty-eight experienced internal auditors from the gaming industry to experimentally investigate two factors that may affect internal auditors' objectivity: (1) the IAF’s reporting line when performing consulting services (i.e., reports to management or the audit committee) and (2) whether or not the IAF is used as a management training ground (MTG). There is limited evidence from prior research suggesting that each of these factors can affect the IAF's objectivity.¹ A major question raised by recent research is whether internal auditors can maintain independence and objectivity while serving two masters: management and the audit committee (Abbott et al. 2010; Hoos et al. 2013; Norman et al. 2010). For example, Norman et al. (2010) find that internal auditors decrease their assessments of fraud risk when the results of fraud risk assessments are reported to the audit committee relative to when the results are reported to management. A second major question arises from the findings of Messier et al. (2011) who show that the use of the IAF as a MTG can lead external auditors to perceive internal auditors as being less objective, resulting in less reliance. A natural follow-up to this finding – which we address in the current study – is whether working in an IAF that is used as a MTG affects internal auditors’ actual objectivity.

The participants in this study completed an investment decision case involving an

¹ See Gramling et al. (2004), Stewart and Subramanian (2010), and Bame-Aldred et al. (2013) for reviews of research on the IAF.
assessment of business risks associated with a gaming company’s proposed development of a
property in a new Asian market. After making participants aware of conflicting preferences for
management and the audit committee, we manipulated (1) who the investment decision analysis
was reported to (management or audit committee) and (2) whether or not the IAF was used as a
MTG. We record two judgments made by the participants: (1) their assessments of nine
significant risks that are relevant to the investment and (2) an overall recommendation for
making the investment.

Our results include the following three findings. First, the internal auditors' risk
assessments for the investment decision reveal an interaction effect between reporting line and
MTG. More specifically, when the IAF is not used as a MTG, internal auditors' risks assessments
do not significantly differ by reporting line. However, when the IAF is used as a MTG, internal
auditors' risk assessments are significantly lower when the IAF reports to senior management
versus the audit committee. Second, when the IAF is used as a MTG, the internal auditors
provide more favorable recommendations for making the investment than when the IAF is not
used as a MTG. Both of these findings suggest that internal auditors working in a MTG setting
may demonstrate impaired objectivity by providing assessments and recommendations that are
more consistent with management's preferences. Third, our analyses of the internal auditors'
recommendations show that the internal auditors provided more favorable recommendations to
the audit committee than to management. We believe that this latter finding is consistent with
Norman et al. (2010), who argue that internal auditors know that management represents a

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2 Case materials indicated that senior management favors expansion by developing a new gaming property in South
Korea. The audit committee, however, “has some serious reservations about potential risks” associated with a
decision to expand into a new, relatively unknown market. These preferences were held constant across all
conditions.

3 As discussed in more detail later in the paper, a panel of industry experts determined the nine relevant business
risks.
greater personal threat and, therefore, provide judgments to the audit committee consistent with management’s preferences. Taken together, the results from the risk assessment and the subsequent final recommendation highlight the importance of reporting lines and suggest that using the IAF as a MTG may threaten internal auditors’ objectivity.

The results of this paper make the following contributions. First, we show that using the IAF as a MTG affects internal auditors' objectivity and judgments. This finding is particularly important because the use of the IAF as a MTG is a common practice in major U.S. corporations (Abbott et al. 2010; Messier et al. 2011). Second, we expand on the recent work by Norman et al. (2010) by showing that who the IAF reports to can affect internal auditors’ risk assessments and final recommendations. Finally, we respond to a call for research that examines IAFs in industries where objectivity and independence are especially important for the IAF’s contribution to corporate governance (Stewart and Subramanian 2010). Whereas previous studies have employed participants from a variety of different industries, the participants in this study work exclusively in the gaming industry - one that is highly regulated and where internal auditors’ objectivity and independence are particularly important (AICPA 2012, ¶1.25 – 1.37).

II. BACKGROUND AND DEVELOPMENT OF HYPOTHESES

Background

The Institute of Internal Auditors (IIA) defines internal auditing as:

An independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

In discussing independence and objectivity, IIA Standard 1100 (IIA 2012) states: "The internal audit activity must be independent, and internal auditors must be objective in performing their work." The IIA standards provide the following interpretations of these two characteristics:
Independence is the freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner. To achieve the degree of independence necessary to effectively carry out the responsibilities of the internal audit activity, the chief audit executive has direct and unrestricted access to senior management and the board. This can be achieved through a dual-reporting relationship. Threats to independence must be managed at the individual auditor, engagement, functional, and organizational levels.

Objectivity is an unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others. Threats to objectivity must be managed at the individual auditor, engagement, functional, and organizational levels.

Guidance by the IIA notes that independence and objectivity, while related, are different concepts. Independence is usually defined by the organizational placement of the IAF; that is, its reporting relationships to senior management or the audit committee. Objectivity is concerned more with the internal auditor's state of mind, judgments, biases, relationships, and behaviors.

In practice, internal auditors perform different tasks that require independence and objectivity: monitoring the effectiveness of internal controls (e.g., Sarens 2009), assessing entity risks (Sarens and De Beelde 2006, Asare et al. 2008), safeguarding assets (Coram et al. 2008), and increasing process efficiency (Gramling et al. 2004). In addition, the IAF also performs consulting services for both management and the audit committee (IIA 2011; Stewart and Subramanian 2010). In today's business environment, risk assessment is one of the more important issues impacting corporate governance (Beasley et al. 2010, COSO 2009, Deloitte 2010, IIA 2007). For example, the listing standards of the New York Stock Exchange (NYSE,

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4 In the current study, we focus on objectivity and hold independence constant by having the chief audit executive report functionally to the Audit Committee and administratively to senior management (i.e., CEO and CFO) consistent with IIA best practice (IIA 2012).
2013) explicitly state that “listed companies must maintain an internal audit function to provide management and the audit committee with ongoing assessments of the company’s risk management processes and system of control” (Rule 303A.07(c)). Kinney (2003) discusses the importance of the IAF to ERM and points out that this area offers a number of opportunities for future research. This paper responds to questions raised by Kinney (2003) with respect to risk assessment and risk response by an IAF.

The following sections develop our hypotheses related to the IAF’s reporting responsibility for a consulting engagement and the effect of using the IAF as a MTG.

**Reporting Line: Management vs. Audit Committee**

Researchers have argued that serving management and the audit committee creates conflicts of interest that can influence internal auditors’ judgments (Abbott et al. 2010, Hoos et. al. 2013, Messier 2010, Norman et al. 2010). This is particularly concerning when management and the audit committee have different priorities for a given task, such as the evaluation of an investment decision. For example, Abbott et al. (2010) argue that management may view the IAF as a means of achieving goals that are aligned with its own incentives, such as generating cost savings and short-term value creation. Conversely, the audit committee may view the IAF as a means to mitigate its litigation and reputational concerns. Messier (2010, footnote 19) states “the internal audit function is now in the position of serving two masters (management and the audit committee) who might have conflicting objectives. For example, management may want to reduce costs in order to improve profits while the audit committee may be more concerned with effectiveness issues.” There has been a dearth of research examining the effects of the IAF dealing with the conflicts of interest that result from work performed for management versus the audit committee.
Norman et al. (2010) provided the first experimental evidence that suggests internal auditors anticipate different expectations from management and the audit committee when reporting their work results. Their findings might be viewed as counterintuitive in that internal auditors reported lower assessed levels of fraud risk when reporting to the audit committee versus management. One might expect that the internal auditors would be more objective (report the same or higher risks) when reporting to the audit committee. However, Norman et al. (2010, 555) provide the following explanations for their findings:

Our analyses reveal that internal auditors view the audit committee as an additional personal threat, in addition to the threats posed by management. Internal auditors believe that all information is filtered through management, regardless of reporting line. In addition, internal auditors fear over-reaction by the audit committee to indicators of risk that can lead to workload increases and management reprisals. Finally, internal auditors believe that management poses the greatest threats when internal auditors report high levels of risk to the audit committee without first working with management to mitigate the risks. Taken together, internal auditors’ beliefs and perceptions lead them to be more concerned about reporting risk to the audit committee than they are concerned about reporting risk to management.

Norman et al.’s (2010) results also seem to be inconsistent with existing practice guidance that suggests that if the IAF reports to the audit committee, it should have greater objectivity (IIA 2012).

The literature on motivated reasoning (Kunda 1990) suggests that incentives to arrive at a certain conclusion influence people’s judgments. Through a self-interest protection mechanism, people consciously and unconsciously adjust their judgments to arrive at this conclusion (Kunda 1990; Hsee 1995, 1996). Following the arguments put forward by this literature, it is likely that internal auditors adapt their judgments to align with their expectations of management’s or the audit committee’s desired output in the context of a risk assessment task when the desired output
is known and internal auditors feel they need to protect their self-interest. Hoos et al. (2013) provide experimental results that are consistent with this assumption. They find that internal auditors follow the chief audit executive’s (CAE) communicated preferences. When the CAE informed the internal auditors of management’s priorities (i.e., cost reduction of internal controls) or the audit committee’s priorities (i.e., effectiveness of internal controls), they designed control processes consistent with the communicated preferences of management or the audit committee.

The results of Norman et al. (2010, 553) further highlight that “internal auditors’ concerns for self-protection do not influence risk assessments until there is a higher level of fraud risk.” It is possible that internal auditors make objective judgments while serving two masters under conditions where they feel that providing objective results comes with low levels of risk for themselves. Consequently, the self-protection mechanism may not bias their judgments under conditions of low levels of personal risk.

Norman et al. (2010) investigate fraud risk assessments — a type of risk that represents a significant challenge to internal auditors’ objectivity since consequences for management or other involved individuals are often severe. Such risks would normally be discussed with management first before they are reported to the audit committee (see Norman et al. 2010, 551). The reporting process might be different for risks external to the company that management cannot influence (e.g., risks related to catastrophic events, political and cultural climate, laws and regulations, etc.) when an investment decision is made (see Kinney 2003). Since management cannot reduce such external risks, internal auditors may not report them to management before

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6 This mechanism applies to internal auditors even though they are subjected to formal accountability (e.g., legal or professional). Moore et al. (2006, 18) point out that such accountability to professional standards “is highly uncertain, activated only in the most egregious cases (...) and is far less salient than immediate accountability pressure.”
reporting to the audit committee. Furthermore, the internal auditor’s personal risk (i.e., challenges for the self-protection mechanism) may be lower for business risks related to a corporate expansion decision than for reporting high levels of fraud risk. As a result, it is possible that assessments of the business (external) risks linked to an investment decision, which management can neither reduce nor influence, lead to different judgment processes of internal auditors when contrasted with Norman et al. (2010)’s findings.

Given that the results of Norman et al.’s study conflict with professional guidance for audit committees\(^7\) and that our task is different from their fraud risk assessment, we posit the following non-directional hypotheses:

**H1\(_a\):** Internal auditors who report to management will provide different risk assessments for the proposed investment than internal auditors who report to the audit committee.

**H1\(_b\):** Internal auditors who report to management will provide different recommendations for the proposed investment than internal auditors who report to the audit committee.

**Internal Audit as a Management Training Ground (MTG)**

A second factor that may influence internal auditors’ objectivity (and their judgments) is whether or not the IAF is used as a MTG. Abbott et al. (2010) and Messier et al. (2011) report that the use of the IAF as a MTG is common practice in a majority of public companies. There are both advantages and disadvantages to using the IAF as a MTG (e.g., Messier et al. 2011, Wood and Wilson 1989). On the one hand, using the IAF as a MTG provides for the development of well-trained senior managers who are exposed to all areas of the company. On the other hand, using the IAF as a MTG may lead to impaired independence and objectivity of

\(^7\) The de Zwaan et al. (2011) study is tangentially related to the issues raised here. They find, using Australian internal auditors, that if the IAF has high involvement in an entity's ERM, that it impacts their willingness to report a breakdown in risk procedures to the audit committee. However, if the IAF has a strong relationship with the audit committee, it does not appear to affect their perceived willingness to report to the audit committee.
the IAF and less investment in the development of internal auditing skills and quality. Although advantages and disadvantages of using the IAF as a MTG have been discussed in the literature and have recently attracted attention in light of the external auditors’ reliance decisions (see Messier et al. 2011), little empirical evidence exists on how this practice affects internal auditors’ judgments.

If the IAF serves as a MTG, then internal auditors may feel more accountable to management when making a judgment (Christopher et al. 2009, Claybrook 2004) and may be more likely to align their judgments with management’s expectations or preferences (e.g. Nagy and Cenker 2002, Drent 2002). In situations – like the one used in our experimental case – where management and audit committee preferences are not aligned, internal auditors may be motivated to gain the approval and respect of their future peers (i.e., management) (e.g., Hogan 1982, Pfeffer 1981, Schlenker 1980). As a result, internal auditors who work for an IAF that operates as a MTG may be more likely to tailor their judgments to be acceptable to management (compared to the audit committee) (Buchman et al. 1996). This leads to the following hypotheses:

**H2a:** When the IAF is used as a MTG, internal auditors will provide lower risk assessments for the proposed investment than internal auditors who are employed in an IAF that is not used as a MTG.

**H2b:** When the IAF is used as a MTG, internal auditors will provide more positive (higher) recommendations for the proposed investment than internal auditors who are employed in an IAF that is not used as a MTG.

**Potential Interaction of Reporting Line with MTG**

An interaction effect may exist between reporting line and using the IAF as a MTG. For example, if an IAF operates as a MTG, the internal auditors who report to management may provide lower risk assessments and more positive recommendations for the proposed investment
than internal auditors who report to the audit committee. On the other hand, if the IAF is not a MTG, then one might predict that the internal auditors will be more objective and there will be no differences between the risk assessments and recommendations that they provide to management versus the audit committee. This leads to the following hypotheses:

**H3a:** The difference in risk assessments caused by internal auditors’ reporting to senior management versus the audit committee will be greater when the IAF is used as a MTG than when the IAF is not used as a MTG.

**H3b:** The difference in recommendations caused by internal auditors’ reporting to senior management versus the audit committee will be greater when the IAF is used as a MTG than when the IAF is not used as a MTG.

### III. METHOD

#### Participants

One hundred fourteen internal auditors from eight gaming companies completed the experimental materials. Twenty-one participants were removed due to a lack of appropriate experience. Five participants were removed from the final sample for failing to correctly identify a critical manipulation (see the results section). The final sample consists of 88 internal auditors with two or more years of experience. Table 1 contains the demographic data on the final sample. Four chief audit executives (4.5%) participated based on their indication of rank on the demographic questionnaire. The majority of the remaining participants were internal audit managers/directors (29.5%) and seniors (43.2%), while staff made up the remaining 22.7 percent. The participants had, on average, 8.64 years of audit experience with the majority of experience in internal auditing. Twenty-seven (30.7%) of the participants were CIAs, twenty-

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8 Some of the eight companies who provided participants sent the requests to all of the internal auditors on their staff. Based on our discussions with the CAEs who helped with the case development, internal auditors with less than two years of experience would not be appropriate participants for a consulting task like the one used in this experiment. Thus, all participants with less than two years of experience were excluded from the final sample.

9 It is likely that all eight CAEs participated, including the five CAEs who helped develop the initial risks. Some companies in our sample use the title "director" to represent a position equivalent to CAE. We did not gather any data that recognized an individual company, per our agreement with the participating companies, thus we can only speculate that the eight CAEs completed the instrument.
four were CFEs (27.2%), thirteen were CPAs (14.8%) and one participant (1.1%) had a CISA certificate. Thus, our participant pool represents an experienced group of internal auditors.

[Insert Table 1 here]

**Experimental Design**

We test our hypotheses using a $2 \times 2$ between-participants design where we manipulate Reporting Line and MTG. The first factor manipulates whether the internal auditors reported their risk assessments and recommendation to senior management or to the audit committee. The second factor manipulates whether or not the IAF is used as a MTG.

To operationalize the first factor, the participants were told the following:

The Chief Audit Executive calls you to his office and asks you to head up the team to assess the risks of expansion into South Korea and to report your assessment to senior management (the audit committee). The Chief Audit Executive provides the following information on the views of senior management and the audit committee:

- Senior management believes expansion to Korea offers minimal risks, advantages of being a first mover, and – if successful - an opportunity to increase company profits by 30-40%.
- The audit committee has some serious reservations about potential risks – including overexpansion, increased leverage, and first-mover risks in an unknown market – that could affect the Company if such an investment is made.

You and a team of internal auditors generate a list of potential business risks that could influence Gaming House’s decision to expand operations to South Korea.

Your task as the team leader is to evaluate each risk and report back to senior management (i.e., CEO and CFO) (the audit committee) about their significance. You are also required to make an overall evaluation of the potential investment.\(^{10}\)

We created tension in this manipulation by indicating that management and the audit committee had different expectations and preferences relating to the investment opportunity.\(^{11}\)

The two levels of the MTG variable were operationalized as follows:

\(^{10}\) The italicized text represents the manipulated differences between the two conditions. Although the text has been italicized in this manuscript, it was not presented as such in the instrument.

\(^{11}\) Gramling et al (2004, p. 240) state the following when there is tension between management and the audit committee: “Which side of the line between the audit committee and management does the IAF fall? If the audit committee and management have different visions for the corporate governance role of the IAF, which vision will dominate?”
**MTG Condition:** Gaming House has a policy of promoting internal auditors into positions outside of the internal audit function. After a period of evaluation, some of the internal auditors are chosen for promotion into management positions outside of the internal audit function.

**Non-MTG Condition:** Gaming House has a policy of not promoting internal auditors into positions outside of the internal audit function. After a period of evaluation, some of the internal auditors are chosen for promotion into management positions within the internal audit function.

**Case Development**

The experimental case involves a hypothetical gaming company (Gaming House), which is based on information taken from the Form 10K of a major gaming company in Las Vegas. The case materials were developed with the help of a CAE from a different major gaming company. After the case background materials (i.e., description of a gaming company and its possible expansion to a new foreign market) were complete, five CAEs from gaming companies in the Las Vegas area were asked to (1) review the case, (2) to generate up to 10 relevant business risks associated with the case, and (3) to assess those risks in terms of their relative likelihood and impact. The five CAEs provided 38 open-ended responses (Mean number of responses per CAE = 7.6). One of the authors and another auditing professor independently coded the 38 responses to identify unique risks, combine similar risks, and delete redundant risks. After reconciling coding differences, a list of nine distinct relevant risks was created for inclusion in the study. These nine risks are shown in Column 1 of Table 2.

[Insert Table 2 here]

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12 We started with descriptions of MTG in Messier et al. (2011) and modified them based on the advice of the CAE who helped with the development of the case.

13 After generating a list of relevant risks, the CAEs were asked to identify the most significant risk in terms of likelihood and assign it a score of 100. They were then asked to assess a relative score – as compared to the most significant risk – to each of the remaining risks. The same process was employed to assess the impact of each risk.

14 As noted, the five CAEs provided a free recall list of risks and were not aware of the nine risks ultimately chosen to be included in the final instrument. Thus, we do not believe that including these CAEs in the final sample should affect the results.
Procedures

The participants received an email from the CAE of their company requesting participation in the study. The email contained a link to the case. The first page of the instrument contained the informed consent and explained that the study contained three parts. The first part presented the background information on Gaming House and told the participants that they were to assume the role of a manager in the IAF. The background information included details about the business and industry and a description of Gaming House's senior management, audit committee, and IAF (see the Appendix for a description). The MTG manipulation was introduced as part of the background information describing Gaming House’s IAF (see description above).

The second part of the case described the potential business decision to develop a gaming operation (casino, hotel, etc.) in South Korea. Participants read of senior management’s motivation to expand based on the growth in Macau over the past several years. The participants were also told that senior management believed that South Korea offers a great opportunity to expand the company’s brand to an emerging and relatively untapped Asian market. At this point, the manipulation for reporting to senior management or the audit committee was introduced. Participants were then told of a meeting with the CAE and the conflicting views of senior management (i.e., favors expansion) and the audit committee (i.e., serious reservations regarding expansion) concerning the investment. The participants were then presented with the nine business risks generated by the panel of CAEs and the following instructions:

Please evaluate the significance of each risk by assessing the following two characteristics of each risk:
1. Likelihood of the risk (i.e., the probability that it will occur)
2. Impact of the risk (i.e., the potential monetary effect of the risk)
Keep in mind that a risk might be highly likely to occur but have minimum impact on Gaming House. Conversely, a risk might be not very likely to occur but
if it occurred could have a significant impact on Gaming House.\textsuperscript{15}

The nine risks were presented to the participants in random order. After assessing the likelihood and impact of each risk, the participants were asked to provide a recommendation and to briefly explain their recommendation.

The third part of the instrument asked for demographic and case-related information.

**Dependent Variables**

We developed two dependent variables to test our hypotheses. We first formed an overall risk assessment measure by summing the products of the likelihood ratings and the impact ratings for each of the nine risks, as shown in Equation 1.\textsuperscript{16}

\[
\text{Overall Risk Assessment} = [L_{r1} \times M_{r1}] + [L_{r2} \times M_{r2}] + \ldots \ldots [L_{r9} \times M_{r9}]
\]  

(1)

The second dependent variable was the participant’s overall recommendation, which was measured on a 100-point scale (0 = Strongly Advise Against Expansion to 100 = Strongly Advise in Favor of Expansion).

**IV. RESULTS**

**Manipulations Checks and Descriptive Data**

As we reported earlier, the final sample included 88 participants. The following manipulation checks were performed. First, in order to determine whether participants understood the preferences and expectations of senior management and the audit committee, we asked, “Based on the information in the case, which of the following groups is more in favor of the expansion to South Korea?” Five participants incorrectly answered this question. We deleted these participants from the final sample because knowledge of management and audit committee preferences is necessary for any motivated reasoning effects to influence the auditors’ risk

\textsuperscript{15} Kinney (2003, 143) states that risk can be assessed along these two dimensions.

\textsuperscript{16} The likelihood and impact assessments were both made using a nine-point scale (1 = Low; 9 = High).
assessments and recommendations. Second, in order to determine if participants understood the manipulated reporting relationships we asked, “In the case study that you just completed, who requested that you undertake the investigation of the risks of the investment in South Korea: Senior Management or the Audit Committee.” Thirty-four participants failed this manipulation check. In retrospect, we believe the high failure rate is attributable to the case materials and the wording of the manipulation check question. In the manipulation check question, we asked, “who requested that you undertake the investigation…” The case materials indicated that the CAE asked the manager to undertake the engagement and to subsequently report to either senior management or the audit committee (refer to the description of the reporting line factor above). Since the manipulation check asked who initiated the request to perform the analysis rather than who the participant ultimately reported to and because CAE was not included as a possible response, it is likely that some participants were confused about how to respond to this question. As a result, we did not drop participants based on their responses to this question. Third, in order to determine if participants properly identified whether or not Gaming House used the IAF as a MTG, we asked the participants: “In the case study that you just completed, which of the following best describes Gaming House’s IAF approach?” The choices described basic manipulation of the MTG versus non-MTG. Nine participants failed this manipulation, but were not dropped from the final sample.

We also asked the participants a series of questions regarding their familiarity with the nature of the case and the specific tasks they were asked to perform. Participants were asked to

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17 If these participants are included our results are weaker, but still significant, for the interaction term (F = 4.00, p-value = 0.048) using the risk assessments. For the participants’ recommendations, the significance of the main effects for Reporting Line and MTG are only moderately significant (p-values = 0.072 and 0.086, respectively).

18 If the nine participants who failed the MTG manipulation and the five participants discussed previously are excluded, our results are weaker, but moderately significant, for the interaction (F = 3.47, p-value = 0.066) using the risk assessments. Our results for the participants’ recommendations are more significant for the main effects than if we only use the final sample of 88.
indicate on a nine-point Likert scale (1 = Not Very Realistic to 9 = Very Realistic) how “realistic the scenario [was] described in the case materials.” The mean response of 6.26 was significantly higher than the mid-point (t = 4.863; p-value < 0.001), suggesting a high level of realism in the case materials. We asked the participants to “indicate whether [they] perform assignments similar to those in this case as part of [their] current or former employment.” The mean response on a nine-point scale (1 = I never perform assignments like this to 9 = I frequently perform assignments like this) was 2.97, which is significantly lower than its mid-point (t = 8.457; p-value < 0.001) but significantly higher than the low-point of the scale (t = 8.174; p-value < 0.001). This indicates that although internal auditors don’t frequently perform tasks like this, it is a task that, on average, they have done before.

In an attempt to capture measurements of real-world analogs to our manipulated independent variables, we asked participants three questions related to their current work arrangements. First, we asked what percentage of their work is performed for senior management versus the audit committee. On average, participants reported that 39.7 percent of work is performed for senior management and 60.3 percent of work is performed for the audit committee. Second, participants were asked, “How often are internal audit staff promoted into management positions outside of the IAF?” On a nine-point scale (1 = Not Often to 5 = Sometimes; 9 = Often), the average response was 5.90, which is significantly greater than the mid-point (t = 3.615; p-value = 0.001). Finally, we asked participants how likely it is that “[they would] become a manager outside of the IAF with [their] current company.” On a nine-point scale (1 = Very Unlikely to 9 = Very Likely), the average response was 5.11, which is not significantly different from the scale’s mid-point (t = 0.462; p-value = 0.645).
Risk Assessments

Table 2 presents participants’ assessments of the nine business risks by condition. Table 3, Panel A presents the adjusted means while Panel B presents the ANOVA results using the participants’ overall risk assessments. As the ANOVA results demonstrate, neither reporting line nor MTG are significant. Thus, H1a and H2a are not supported. However, there is a significant interaction between reporting line and MTG (F = 5.10; p = 0.027). This finding indicates that the internal auditor’s risk assessments are affected in different ways depending on whether the IAF is used as a MTG or not. Figure 1 presents a plot of the observed interaction.

We examine the simple effects by looking at the effect of reporting line across each level of MTG. When the IAF is not used as a MTG, internal auditors’ risks assessments are not significantly different when the IAF reports to senior management versus the audit committee (means = 279.9 v. 249.9; F = 1.44; p-value = 0.234), which suggests that internal auditors are acting objectively in making their risk assessments when the IAF is not a MTG. However, when the IAF is used as a MTG, internal auditors’ risk assessments are significantly lower when the IAF reports to senior management versus the audit committee (mean = 244.3 v. 294.2; F = 3.98; p-value = 0.049). Thus, H3a is supported. This latter result suggests that the internal auditors may be acting less objectively when in a MTG environment by reporting lower assessed risks, consistent with management’s desire to make the investment.

Overall Recommendation

Table 4, Panel A presents the adjusted means while Panel B presents the ANOVA using the participants' overall recommendations. The internal auditors’ overall risk assessments were included in the ANOVA as a covariate. The main effects for Reporting Line (F = 4.56; p-value =
0.036) and MTG (F = 4.70; p-value = 0.033) are both significant while the interaction is not (F=0.54; p-value = 0.464). As expected, the covariate for the overall risk assessments is significant (F = 15.43; p-value < 0.001) and negatively correlated with the internal auditors' recommendations (i.e., the higher the risk assessments, the lower the recommendation). The internal auditors provided more positive recommendations to the audit committee than to management (Means = 69.5 vs. 63.1). With respect to H1b, this result is consistent with Norman et al. (2010)'s findings that internal auditors reported lower fraud risks to the audit committee. When the IAF is a MTG, the internal auditors provided more positive (higher) recommendations for making the investment than when the IAF was a non-MTG (Means = 69.9 vs. 62.7). This result supports H2b and again shows that the use of the IAF as a MTG can lead to less objective judgments. Since the interaction was not significant, H3b was not supported. Figure 2 plots the interaction, which clearly indicates the significance of the main effects.

[Insert Table 4 and Figure 2 here]

V. DISCUSSION AND CONCLUSION

This study was designed to examine two factors that could affect the objectivity of internal auditors’ judgments. We examine how reporting to management versus the audit committee and using the IAF as a MTG impacts internal auditors’ objectivity when performing a consulting engagement (i.e., asked to evaluate a significant investment by the company). We find that internal auditors report lower assessed risks to management versus the audit committee when the IAF is used as a MTG. The internal auditors' risk assessments are not significantly different when the IAF is not used as a MTG. However, when making their final recommendations, the internal auditors provide more positive recommendations to the audit committee than to management and, when the IAF is a MTG, the internal auditors provide more
positive recommendations regarding the proposed investment than when the IAF was a non-MTG. Overall, our results suggest that, under certain circumstances, internal auditors' objectivity can be adversely affected by who they report their risk assessments and recommendations to and by whether their organization uses the IAF as a MTG.

This study makes a number of important contributions. First, we demonstrate that using the IAF as a MTG significantly affects internal auditors' objectivity. Since most U.S. companies elect to use the IAF as a MTG (Abbott et al. 2010; Messier et al. 2011), this finding is particularly significant from a corporate governance perspective. It may be important for corporate leaders to evaluate the strategic missions of their companies’ IAFs, and independent audit committees and external auditors may need to monitor the IAF and its objectivity more closely. Second, our results support the findings of Norman et al. (2010), who show that the internal auditor’s reporting relationship matters. More specifically, the internal auditors in our study provided more positive final recommendations to the audit committee than to management. All things equal, one might expect that the internal auditors would provide lower recommendations to the audit committee given the committee's reservations about the investment. One possible explanation for this result is that the internal auditors might provide more favorable recommendations to the audit committee to support management's desire to fund the project.

Regulators and standard setters may find our results useful when establishing best practices and standards prescribing how the IAF should be monitored within the organization. Our results also provide relevant information to CAEs, board and audit committee members, and senior management. Audit committee members who rely on an IAF that is used as a MTG may need to develop an awareness of the conflicts of interest that internal auditors face when working
towards a potential promotion into a management position. Senior management should have a clear vision for the strategic role of the IAF and should be aware of potential judgment biases. For instance, senior management can request assurance and consulting services, develop the mission statement of the IAF in cooperation with the CAE, and decide whether the IAF is used as a MTG as one element of the organization’s strategy. It is likely that decisions related to these elements will influence internal auditors' judgments. Career CAEs (i.e., CAEs that are not promoted into management positions) can play a crucial role in this setting and might serve as a safeguard for objectivity. They can interpret the work output of the IAF and communicate it to management and the audit committee in an unbiased manner, encourage internal auditors to maintain objectivity when providing work that is relevant to management and the audit committee, and show commitment to the development of important skills for internal auditors through further training that is necessary to maintain a high quality IAF.

The results of this study should be viewed in light of certain limitations. First, our case was designed to be specific to the gaming industry, so extrapolation beyond this industry may be limited. Second, although a panel of experts was used to develop the list of relevant business risks presented to the participants, it is possible that our list was not representative of the risks relevant to this type of investment decision.
APPENDIX
Information on Gaming House the Experimental Materials

Business and Industry

Your employer, Gaming House, is one of the world’s largest and most respected gaming companies. The company was founded in 1979 and became a publicly-traded company on the New York Stock Exchange in 1990. The Company’s headquarters are in Las Vegas. Gaming House’s management executes its strategy by seeking to ensure that Gaming House owns, manages, and invests in resorts that are superior to competitors’ properties in the geographic areas in which the resorts are located. Gaming House owns and operates successful major properties in Nevada and Macau, and it also owns several smaller properties in Illinois, Louisiana, and New Jersey.

The Company’s casino resorts generally operate in highly competitive environments. The outlook for the gaming and entertainment industries in the U. S. remains highly uncertain. However, there is an expectation that the gaming market in Las Vegas will stabilize and possibly increase slightly over the next two years. Gaming House’s Macau properties have recently become the company’s largest revenue generator, but competition in the area is steadily increasing as more properties are introduced each year.

Gaming House’s Senior Management

Gaming House’s senior management is made up of a Chief Executive Officer (CEO), a Chief Operating Officer (COO), Chief Financial Officer (CFO), Chief Information Officer (CIO), and four divisional operating officers. Senior management maintains a proper attitude towards strong internal controls over financial reporting. Senior management has an incentive-based compensation plan (e.g., stock options and bonuses) that is based on the Company’s growth in sales and profits.

Gaming House’s Audit Committee

Gaming House’s audit committee is comprised of three directors who meet the applicable standards of independence and financial literacy for NYSE’s Corporate Governance Listing Standards. One member qualifies as an “audit committee financial expert” as defined by the SEC. The audit committee meets at least quarterly. At each of these meetings, the committee meets with management, the Chief Audit Executive, and the independent auditors in separate sessions. The audit committee has increasingly become more focused on the Company’s risk assessment and risk management policies (e.g., appropriate guidelines and policies to govern the risk assessment process, major financial risk exposures, and the steps management has undertaken to control them).

Gaming House’s Internal Audit Function

The responsibilities of Gaming House’s internal audit function (IAF) are consistent with the Institute of Internal Auditors (IIA) definition of internal auditing: “Internal auditing is an
independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.” Consistent with IIA standards, the IAF has the authority to investigate any area within Gaming House’s operations.

The IAF consists entirely of in-house employees. You are one of 50 internal auditors who are employed by Gaming House. The internal auditors are compensated based on a fixed salary schedule. Approximately 60% of the internal auditors carry the Certified Internal Auditor and/or Certified Public Accountant designations. The remaining internal auditors are working towards relevant professional certifications.

The Chief Audit Executive reports functionally to the Audit Committee and administratively to senior management (i.e., CEO and CFO). In performing its work, the internal audit function works on projects requested by both management and the audit committee.

AN IMPORTANT BUSINESS DECISION

Since the beginning of the current fiscal year, Gaming House’s senior management has been considering developing a gaming operation (casino, hotel, etc.) in South Korea. After seeing the growth in Macau over the past several years, senior management believes that South Korea offers another great opportunity to expand Gaming House’s brand to an emerging and untapped Asian market.

The following is selected information on the South Korean gaming environment:

- South Korea boasts the third largest and second fastest-growing economy in East Asia.
- South Korea's tourism industry has produced steadily increasing revenue over the past decade.
- There are 19 operating casinos in South Korea.
- Gaming revenue has steadily increased over the past decade.
- Several influential anti-gambling groups have recently tried to limit or ban gambling in South Korea.
- Members of the Ministry of Culture and Tourism were recently indicted for accepting illegal bribes from state-licensed gambling companies.
REFERENCES


Figure 1
Effects of Reporting Line and Management Training Ground on Internal Auditors’ Overall Risk Assessments

Dependent Variable: Overall Risk Assessment
Figure 2: Effects of Reporting Line and Management Training Ground on Internal Auditors’ Recommendation

**Dependent Variable:** Internal Auditor’s Recommendation

![Graph showing the effects of reporting line and management training ground on internal auditor's recommendation.](image-url)
## Table 1
Participant Demographic Data
(N=88)

<table>
<thead>
<tr>
<th>Job title</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAE</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Internal Audit Manager/Director</td>
<td>26</td>
<td>29.6</td>
</tr>
<tr>
<td>Internal Audit Senior</td>
<td>38</td>
<td>43.2</td>
</tr>
<tr>
<td>Internal Audit Staff</td>
<td>20</td>
<td>22.7</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.0</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Total years experience in:</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal auditing – Public company</td>
<td>50</td>
<td>1.0</td>
<td>20.0</td>
<td>5.31</td>
<td>4.16</td>
</tr>
<tr>
<td>Internal auditing – Private company</td>
<td>49</td>
<td>0.5</td>
<td>15.0</td>
<td>4.75</td>
<td>3.27</td>
</tr>
<tr>
<td>External auditing – Big 4</td>
<td>11</td>
<td>1.0</td>
<td>9.0</td>
<td>4.50</td>
<td>2.52</td>
</tr>
<tr>
<td>External auditing – non Big 4</td>
<td>11</td>
<td>0.5</td>
<td>8.0</td>
<td>2.56</td>
<td>2.23</td>
</tr>
<tr>
<td>Nevada Gaming Control Board</td>
<td>2</td>
<td>2.5</td>
<td>11.0</td>
<td>6.75</td>
<td>6.01</td>
</tr>
<tr>
<td>Other experience</td>
<td>18</td>
<td>0.5</td>
<td>30.0</td>
<td>9.50</td>
<td>8.90</td>
</tr>
<tr>
<td>Total experience (across all participants)</td>
<td>88</td>
<td>2.00</td>
<td>36.00</td>
<td>8.64</td>
<td>7.47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional certifications:</th>
<th>No.</th>
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</thead>
<tbody>
<tr>
<td>CIA</td>
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</tr>
<tr>
<td>CPA</td>
<td>13</td>
</tr>
<tr>
<td>CFE</td>
<td>24</td>
</tr>
<tr>
<td>CISA</td>
<td>1</td>
</tr>
<tr>
<td>Other Certification</td>
<td>9</td>
</tr>
</tbody>
</table>
### Table 2
Participants’ Risk Assessments by Treatment
Mean
(Std. Dev.)

<table>
<thead>
<tr>
<th>Risk No.</th>
<th>Risk Description</th>
<th>Management</th>
<th>Audit Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MTG (N = 22)</td>
<td>Non-MTG (N = 23)</td>
</tr>
<tr>
<td>1</td>
<td>The risk that a political (e.g., war, economic crisis) or natural disaster will occur and negatively impact Gaming House's investment.</td>
<td>29.18 (13.65)</td>
<td>31.13 (15.83)</td>
</tr>
<tr>
<td>2</td>
<td>The risk that the company will violate the Foreign Corrupt Practices Act while establishing or operating a property in South Korea.</td>
<td>34.91 (22.58)</td>
<td>32.13 (14.86)</td>
</tr>
<tr>
<td>3</td>
<td>The risk that available financing for the Korean property may be too expensive to allow for acceptable returns on the investment.</td>
<td>19.73 (13.36)</td>
<td>34.61 (20.52)</td>
</tr>
<tr>
<td>4</td>
<td>The risk that Gaming House does not have or is unable to develop the right managerial talent to operate a new property in South Korea.</td>
<td>24.32 (13.14)</td>
<td>27.91 (20.51)</td>
</tr>
<tr>
<td>5</td>
<td>The risk that Korean government and gaming regulations will be overly burdensome and prohibitive.</td>
<td>28.36 (18.34)</td>
<td>31.87 (21.55)</td>
</tr>
<tr>
<td>6</td>
<td>The risk that Gaming House's products and services will not be attractive or successful in a Korean market.</td>
<td>19.05 (12.50)</td>
<td>22.74 (16.18)</td>
</tr>
<tr>
<td>7</td>
<td>The risk that an effective system of internal controls - including internal audit - may not be achievable at the Korean property.</td>
<td>24.77 (14.17)</td>
<td>26.57 (16.47)</td>
</tr>
<tr>
<td>8</td>
<td>The risk that other entrants in the Korean market may erode Gaming House returns.</td>
<td>33.59 (13.97)</td>
<td>38.04 (18.98)</td>
</tr>
<tr>
<td>9</td>
<td>The risk that foreign tax rates will increase over time and erode Gaming House profits.</td>
<td>30.36 (11.78)</td>
<td>34.96 (16.46)</td>
</tr>
<tr>
<td></td>
<td>Overall Risk Assessment</td>
<td>244.27 (65.15)</td>
<td>279.96 (94.89)</td>
</tr>
</tbody>
</table>

**Note:** The likelihood and magnitude assessments were both made using a nine-point scale (1 = Low; 9 = High).

Overall Risk Assessment = \([L_{i1} \times M_{i1}] + [L_{i2} \times M_{i2}] + \ldots \ldots + [L_{i9} \times M_{i9}]\)
Table 3
ANOVA for Overall Risk Assessments

Panel A: Cell Means

<table>
<thead>
<tr>
<th>Management Training Ground</th>
<th>Audit Committee</th>
<th>Management</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-MTG</td>
<td>249.9</td>
<td>279.9</td>
<td>265.6</td>
</tr>
<tr>
<td></td>
<td>(75.1)</td>
<td>(94.9)</td>
<td>(86.4)</td>
</tr>
<tr>
<td></td>
<td>n=21</td>
<td>n=23</td>
<td>n=44</td>
</tr>
<tr>
<td>MTG</td>
<td>294.2</td>
<td>244.3</td>
<td>269.2</td>
</tr>
<tr>
<td></td>
<td>(92.1)</td>
<td>(65.1)</td>
<td>(82.8)</td>
</tr>
<tr>
<td></td>
<td>n=22</td>
<td>n=22</td>
<td>n=44</td>
</tr>
<tr>
<td>Overall</td>
<td>272.6</td>
<td>262.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(86.2)</td>
<td>(82.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n=43</td>
<td>n=45</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: ANOVA Results

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>6331306.45</td>
<td>4</td>
<td>1582826.61</td>
<td>229.96</td>
<td>.000</td>
</tr>
<tr>
<td>MTG</td>
<td>401.24</td>
<td>1</td>
<td>401.24</td>
<td>.06</td>
<td>.810</td>
</tr>
<tr>
<td>Reporting Line</td>
<td>2176.89</td>
<td>1</td>
<td>2176.88</td>
<td>.32</td>
<td>.575</td>
</tr>
<tr>
<td>MTG * Reporting Line</td>
<td>35087.36</td>
<td>1</td>
<td>35087.36</td>
<td>5.10</td>
<td>.027</td>
</tr>
<tr>
<td>Error</td>
<td>578179.55</td>
<td>84</td>
<td>6883.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6909486.00</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = .916 (Adjusted R Squared = .912)

Dependent variable: Overall Risk Assessment = [L₁ × M₁] + [L₂ × M₂] + …… [L₉ × M₉]
MTG = MTG or Non-MTG.
Reporting Line = Audit Committee or Management
### Table 4
ANOVA for Recommendations

#### Panel A: Cell Means

<table>
<thead>
<tr>
<th>Management Training Ground</th>
<th>Reporting Line</th>
<th>Audit Committee</th>
<th>Management</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-MTG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Audit Committee</th>
<th>Management</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-MTG</td>
<td>66.4 (14.9)</td>
<td>59.3 (19.0)</td>
<td>62.7 (17.4)</td>
</tr>
<tr>
<td>MTG</td>
<td>72.4 (16.4)</td>
<td>67.3 (13.0)</td>
<td>69.9 (14.9)</td>
</tr>
<tr>
<td>Overall</td>
<td>69.5 (15.8)</td>
<td>63.1 (16.8)</td>
<td></td>
</tr>
</tbody>
</table>

#### Panel B: ANOVA Results

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>387397.69</td>
<td>6</td>
<td>64566.28</td>
<td>294.59</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>MTG</td>
<td>1030.68</td>
<td>1</td>
<td>1030.68</td>
<td>4.70</td>
<td>.033</td>
</tr>
<tr>
<td>Reporting Line</td>
<td>999.132</td>
<td>1</td>
<td>999.13</td>
<td>4.56</td>
<td>.036</td>
</tr>
<tr>
<td>MTG * Reporting Line</td>
<td>118.45</td>
<td>1</td>
<td>118.447</td>
<td>0.54</td>
<td>.464</td>
</tr>
<tr>
<td>Overall Risk Assessment</td>
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<td>1</td>
<td>3380.94</td>
<td>15.43</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Error</td>
<td>17753.31</td>
<td>81</td>
<td>219.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>405151.00</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = .956 (Adjusted R Squared = .953)

Dependent variable: Recommendation (100 point scale with 0 = strongly advise against expansion to 100 = strongly advise in favor of expansion).

MTG = MTG or no-MTG.

Reporting Line = Audit committee or Management

Overall Risk Assessment = \[L_{r1} \times M_{r1}\] + \[L_{r2} \times M_{r2}\] + \ldots . \[L_{r9} \times M_{r9}\]

* For an undetermined reason, one participant’s overall recommendation was not recorded. We believe that this is an error in the Qualtrics system.