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Table of Contents

Editor's Report

It is with great pleasure (and considerable tardiness) that I present to you the 2016 issue of *Journal of Risk Education (JRE)*.

Thanks to the reviewers and associate editors who worked so hard to achieve our goal of fast turnaround on (most of) the submissions we receive.

I am pleased to announce that Dr. Brad Karl has agreed to serve as my co-editor beginning with the next issue. I am also pleased to tell you that our website will be undergoing a makeover in the next few months and should be much-improved in appearance and functionality.

Please continue to send us your papers for consideration. If you have questions, don't hesitate to ask them. I can be reached at editor@jofriskeducation.org

Sincerely,

Brenda Wells, Ph.D., CPCU, AAI, CRIS

Editor
Robert F. Bird Distinguished Professor of Risk and Insurance
East Carolina University

Call for Papers

The *Journal of Risk Education* (*JRE)* submissions of articles and other materials for its 2017 issues.

The journal offers several publication features:

Articles: double-blind peer reviewed articles related to risk management and insurance teaching and education. Both theoretical and pedagogical pieces are encouraged.

Editorials: editorially-reviewed commentary related to risk and insurance education.

Book Reviews: editorially-reviewed summaries of books and periodicals that pertain to risk management and insurance, with preference given to those items that have practical classroom applications.

Doctoral Perspectives: double-blind peer reviewed articles that are by or for doctoral students planning to become risk educators in the future. Any topic of relevance to doctoral candidates may be submitted.

Teaching Cases: cases for use in the risk management classroom. Teaching cases should be founded in the academic and practitioner literature, and will be double-blind peer reviewed.

To submit an article for consideration, please create an account on our website at www.jofriskeducation.org and follow our electronic submission process. If you are willing to serve as a reviewer for future papers, please contact the editor.

For questions and more information, please contact:

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What is the Value of an RMI Degree to the Insurance Industry?*

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ABSTRACT

This research surveys insurance professionals and asks them what skills and attributes they find of specific value to a new hire who has recently graduated from college. This investigation differentiates itself from similar research in that it takes a specific focus on a single industry, the insurance industry, and the perceived value of a risk management and insurance (RMI) degree. Therefore, the survey represents a narrow investigation of the perceptions of a single industry and the value that higher education RMI programs might represent to the industry. The relationship the insurance industry shares with the RMI programs of higher education is unique in that the industry demand for human capital is large, while the supply of new graduates with RMI degrees is relatively small. It is estimated that the total number of annual RMI graduates fulfills only about five to 15 percent of the total demand for new hires. Given these dynamics, the key question addressed in this research is whether preexisting familiarity with the operations of the insurance industry (proxied by an RMI degree) holds unique value to prospective employers in the industry. The answer to that question should be of significant importance to the RMI programs of higher education and students who are contemplating careers in insurance.

INTRODUCTION

Does a degree in risk management and insurance (RMI) represent a significant value-added attribute to a new graduate when looking for a job in the insurance industry? The answer to that question should be of significance to both the student and the RMI programs of higher education. While the anticipated near-term retirement of older workers from the insurance industry would suggest a heightened demand for RMI graduates, declining state funding and an associated shifting of educational costs to the individual contribute to a significant increase of uncertainty among smaller, boutique-type, programs – a characteristic of many RMI programs.

Within the institutional setting, a particularly common solution when confronted with anticipated prolonged economic constraints is to abandon smaller and lower profile programs (Savidge, 2016). As a result, many RMI programs find themselves particularly vulnerable during difficult economic times. Concurrently, research surveying Millennials find that less than one in ten were very interested in working in the insurance industry (The Institutes, 2012). College students reported even less interest. Thus, at a time when administrators are looking for ways to cut their expenses, small RMI programs are not only at risk of being eliminated, they also are facing an enrollment challenge due to a relatively disinterested student population. It is especially ironic that these conditions exist at a time when the demand for insurance industry labor is expected to increase significantly within the next few years (McKinsey & Company, 2010).

In an effort to help maintain the relevancy of RMI programs in this challenging environment, this research reaches out to the insurance industry and asks what skills and attributes it truly values and what specific value it places on RMI education in that context. The answer to these questions will help RMI programs better understand the specific value the insurance industry places on an RMI degree, as well as what other specific skills and attributes programs should be cultivating in order to retain relevance in a challenging academic environment.

**Funding for this research was made possible by a grant from the Katie School of Insurance and Financial Services, Illinois State University.*

Using a Likert survey mechanism, this research queries insurance industry professionals and asks three broad questions focusing on the attributes and skills of recent college graduates. First, what skills and attributes are important when considering a new graduate for a position in the company? Second, assess the degree to which recent graduates possess, or have mastery over, the skills and attributes identified in the first question. While the first two questions are not atypical of many earlier surveys assessing industry more broadly, the third question represents a unique query within the scope of the literature. It asks respondents to assign value to each attribute where the pool of available value is limited. In doing so, respondents must reveal their *relative* preference for one attribute over others. As a result, the survey results not only ranks the value of different attributes, but it also reveals the relative degree to which certain attributes are more or less important to the insurance industry.

Additionally, this research specifically asks the insurance industry respondents as to the value of an RMI degree when considering a newly graduated position applicant. Thus, this research is not only insurance industry specific, but it also asks for the respondent to evaluation RMI education as an attribute, as well. Some have argued that, outside of some occupations demanding highly refined and/or technical skills, e.g., engineering, accounting, actuarial, etc., the importance of a specific undergraduate major is of relatively less significance than other highly valued so-called soft skill attributes when seeking early-career employment (e.g., Association of American Colleges and Universities, 2013). The findings of this research will have central importance to the faculty and administrators of higher education RMI programs. RMI students and students contemplating careers in insurance will also benefit from a refined understanding as to what prospective employer actually value in new hires.

The next section of the paper describes the current opportunities, challenges, and threats currently facing RMI programs in higher education. Subsequently, a review of pertinent literature is presented. Research methodologies and associated results are then presented followed by a summary of the findings and major implications.

OPPORTUNITIES AND CHALLENGES IN RISK MANAGEMENT HIGHER EDUCATION

Those responsible for the RMI programs of higher education are facing a dynamic marketplace. The anticipated retirement of a significant proportion of the insurance industry's workforce bodes well for the demand for RMI graduates. However, continuing declines in governmental funding of higher education at public institutions, and the associated increase in tuition, hold potent implications for those programs.

The Demand for New Talent

As the Baby Boom generation heads into retirement, the demand for new human capital in the nation's workforce will increase. While this increase in demand for new employees will be broadly felt across the employment marketplace, the insurance industry is expected to experience acute shortages (McKinsey & Company, 2010). McKinsey anticipates one-fourth of the 2010 insurance industry workforce will have retired by 2018. That suggests that the insurance industry will lose about 600,000 individuals to retirement within the next few years. While the insurance industry's demand for human capital will be significant in the near future, the ability of higher education's RMI programs to meet those needs is limited. There are only about 50 RMI programs in the US (International Risk Management Institute, 2015). The largest of those programs typically graduate about 150 students annually (Holbrook, 2012) and in a typical year, there are approximately 1,000 RMI graduates entering the workforce (Risk Management Monitor, 2011).

Thus, even though the insurance industry stands as the primary employment target for most RMI graduates, those graduates represent only about five to 15 percent of the total number of new hires by the industry each year. While the insurance industry might absorb most of those graduates rather quickly, the industry must look elsewhere for the majority of its newly hired work force.[1] Thus, approximately 85 to 95 percent of the industry's annual new hires have little, if any, formal education regarding the insurance discipline.

[1] Cole and McCullough (2012) suggest that RMI graduates experience nearly 100 percent placement.

Consequently, the insurance industry absorbs significant fixed costs related to training new hires (Cole and McCullough, 2012), irrespective of the new hires' academic background.

Coming Challenges

While the near-term anticipated retirement of Baby Boomers from the insurance industry bodes well for the demand for RMI program services, there are also some critical challenges. Consider for example, the implications of continued reduced governmental funding of higher education. Since the 2008 recession, states have cut higher education funding, on average, by 23 percent on a per student basis (Mitchell and Leachman, 2015). Additionally, over the 2001-2013 period alone, the average tuition at public four-year institutions increased 48.6 percent (US Department of Education, 2015).[2] While these shifts in funding affect the broader operations of public institutions, they are likely to have disproportionately negative effects on relatively smaller programs (such as many RMI programs) that traditionally enroll fewer students, represent smaller revenue flows, employ but a few faculty, etc.

This cost shifting coincides with an increasingly pragmatic perception of higher education. Once broadly viewed as a public good – one to be (heavily) subsidized by the government, higher education is increasingly viewed more as a commodity to be assessed in terms of costs and benefits (Harvey, 2000). In its annual survey of college students, the Higher Education Research Institute (2015) reports that the importance that college students place on their ability to get good jobs because of their formal education has increased substantially since 1983, representing an all-time high. That said, despite the many opportunities in the insurance industry awaiting new RMI graduates, the millennial generation's interest in the industry is weak. KRC Research (2008) found that 65 percent of the Millennials surveyed reported that they felt the insurance industry had a poor public image. Additionally, 53 percent indicated that the industry was not innovative. McKinsey & Company (2010) also found that the industry's reputation for its opportunities and adaptability ranked in the lowest quartile across all industries. Thus, a general lack of interest in the insurance industry as a career path for current students represents yet another hurdle for RMI programs as they endeavor to maintain viability in an increasingly competitive educational environment. Given these many challenges and current marketplace dynamics, RMI programs would be well served to once again critically contemplate the demands and expectations of their key stakeholders. Failure to do so represents an opportunity lost – one that may not come again.

Any stakeholder assessment of higher education generates a familiar set of core stakeholders, e.g., society, the students themselves, the students' families, faculty, employers, etc. (see for example, Gross and Godwin, 2005).[3] While the relative importance of the interests of any given stakeholder is a matter of debate, the central role of the student in the process is not - and students increasingly demand enhanced employment opportunities in exchange for their tuition dollars. The ultimate fulfillment of those student demands however, lay in the hands of prospective employers; employers are the gatekeepers, in this context. Thus, while few stakeholder assessments of higher education would place the interests of employers at the center of the analysis, their demands assume a significant role within that framework; meeting the demands of the student means meeting the demands of employers.

This understanding is not new - the literature and public media are full of survey results querying employers with regard to their expectations of graduates and what skills and attributes are highly valued.[4] Indeed, a quick internet search using the phrase, "what employers want in a new graduate," yields over 200 million hits. However, given the singular focus of this research on the viability of RMI programs, one might question the ability of those broader surveys to reveal specific nuances of the demands and expectations of the

[2] As a point of comparison, private institution tuition has only increased 18 percent over that same period.

[3] For further discussion of stakeholder analyses, as applied to higher education, please see for example, Rowley, 1997 and Dooris, Kelley and Trainer, 2004.

[4] Media outlets such as *Forbes* and *The Atlantic* regularly survey industry regarding the highly valued attributes of new college graduates. Additionally, the core goal of some organizations, such as the National Association of Colleges and Employers, is to facilitate a better understanding between higher education and industry.

insurance industry. Indeed, the Collegiate Employment Research Institute (2012) found that significant differences sometimes exist across various industries in terms of what skills and personal attributes are relatively more highly prized. With specific respect to the insurance industry, little research has surfaced in the literature or media - a review of the existing literature reveals but a single survey from 1998 that focused on the insurance industry's expectations and demands of then-recent graduates. This current research revisits the issue, updating what we understand about the insurance industry's expectations and demands.

LITERATURE REVIEW

Standing as the only study of its kind, Bell and Wolverton (1998) queried insurance company personnel directors and asked three basic questions regarding their perceptions of recent college graduates. First, "…indicate how important you consider each characteristic for future insurance professionals…" Second, "…evaluate recent college graduates in regard to the following characteristics." In the third query, the respondents were once again asked to consider the list of attributes presented in the first survey question and identify which three were most relevant to each of five different insurance industry job-functions.[5] The results reveal that the respondents perceive some significantly differing required skills sets across some functions, e.g., analytic skills are perceived to be highly important to actuaries and only weakly important to agents. Conversely, some attributes, such as verbal communication skills, were perceived to be very important to agents and customer service representatives, while being of only limited value to others, such as actuaries.

A rank ordering of the results of the first two queries provide an opportunity to identify the degree of alignment between highly valued skills and the graduate's perceived mastery of the skill (see Table 1).

Table 1. What Insurance Industry Employers Want in a Job Applicant[6]

Characteristic/Attribute	Importance of Specific Characteristic	Perceived Abilities of Recent Graduates
Exhibits Ethical Professional Behavior	1	4
Works Well as a Team Member	2	9
Strong Verbal Communications Skills	3	7
Exhibits Enthusiasm for Learning	4	1
Strong Written Communications Skills	5	8
Strong Analytic/Problem Solving Skills	6	5
Adapts Quickly in Unfamiliar Situations	7	6
Strong Computer Skills	8	2
Works Well as a Team Leader	9	3

Source: Bell and Wolverton, 1998

Relatively close numeric alignment across the two queries would imply a reasonable degree of focused skill development on attributes that are similarly valued by the industry. For example, the similarity of values associated with *Strong Analytic/Problem Solving Skills* might suggest that graduates are arriving at industry's doorstep with an appropriate level of analytic acumen. Conversely, the significant disparity with respect to the *Works Well as a Team Member* attribute suggests that recent graduates were perceived to be lacking in their ability to work well on a team. While of interest and informative, Bell and Wolverton's work fails to specifically address the perceived value of a recent graduate's knowledge of the insurance industry – the focus of this research.

This current research not only serves to update the general content first captured by Bell and Wolverton, but it also specifically addresses the value that the insurance industry places on a new graduate's knowledge of

[5] The specified job functions included were actuary, agent, claims representative, customer service representative, and underwriter.

[6] Research respondents were the personnel directors at 158 insurance companies, representing a 28% response rate from 568 randomly chosen US insurance companies.

the insurance industry (proxied by an RMI degree). For the sake of enhancing comparability of results across time, this research parallels much of the earlier work of Bell and Wolverton. This research also makes a unique contribution to the literature in that it presents the respondent with a query that asks the respondent to allocate a weighted importance to the various skills and attributes in the list. In doing so, it reveals the respondent's perspective as to the degree to which certain skills and attributes are important, *relative* to other skills and attributes. Thus, while the initial query merely asks respondents to allocate a value to a given attribute reflecting its perceived importance, this latter query asks the respondent to make choices among skills and attributes, given limited resources. In essence, it asks the respondent, "If something had to be sacrificed in pursuit of valued attributes, what is of preeminent importance - what would you sacrifice?" These dynamics reflect the RMI program reality. In an effort to help students progress through their program in a timely fashion, i.e., four years, only so many credit hours can be mandated. Conversely, there may be some attributes that, while representing some value, simply are not perceived to be as important as other attributes. The following section describes the methodology employed in this current research and also highlights some of the most interesting results.

METHODOLOGY AND RESULTS

The survey mechanism development began with a meta-analysis of the extant literature, including special attention to Bell and Wolverton's earlier work. That analysis allowed for the identification of a number of reoccurring themes included in comparable surveys. Survey development also included interviews with three separate focus groups comprised of insurance industry professionals from a variety of functional disciplines, e.g., underwriting, management, human resources, etc. Those interviews helped shape the final survey instrument and alerted us to a few specific skills and attributes for which the insurance industry might possess special interest.

Disseminated by *The Institutes*, the Katie School NextGen Survey was executed in October, 2012.[7] Invitations to participate in the survey were extended to approximately 1,200 CPCU Society members, from which 371 usable responses were received (about a 30% participation rate). The intent of this research is to identify the value of an RMI degree for a candidate seeking employment for a relatively general position in the insurance industry. Given that focus, the preamble of the survey provides the following instructions to respondents, "For the purposes of this survey, please exclude consideration of actuarial science candidates, producers, and those with MBAs."[8]

The survey includes four sections (the complete set of survey inquiries are presented in in the Appendix of this report):

1. Respondent Profile
2. Question I: What skills and attributes are important?
3. Question II: How well prepared are new graduates?
4. Question III: What skills and/or attributes are m*ost* important?

Respondent Profile

The respondent profile section of the survey included ten queries intended to capture data that might allow for discernment as to any potential biases in the responses (detailed summary results of these queries are presented in Appendix A). These queries included:

1. Within the last 5 years, have you had the opportunity to work with a recent graduate who has a risk management or insurance degree?
2. How has professional development in your firm changed in the past 5 years?

[7] *The Institutes* (www.theinstitutes.org/) is a leading provider of risk management and property-casualty insurance education in the US.

[8] Research has established that an applicant's major has preeminent importance when applying for a position that requires specific skills, such as engineering, accounting, actuarial work, etc. (National Association of Colleges and Employers, 2012 p 26).

3. How many years of work experience do you have?
4. Years of insurance experience
5. Please indicate your current functional area
6. Are you currently in a management position?
7. What is the highest level of education you have attained?
8. What age range are you in?
9. What is your gender?
10. Approximately how many full-time employees are there in your organization?

Of particular note is that about half of the respondents (49%) had the opportunity to work with recent graduates with an RMI graduate within the previous five years. The respondent pool was dominated (64%) by individuals who, based on their age, are identified as Baby Boomers (older than 54). At the other end of the age spectrum, Millennials (those younger than 34) comprised only 11% of the respondents. The average number of years of experience in the industry was 25. A handful of functional disciplines within the insurance industry dominated the respondent pool, including underwriting (30%), sales/production (15%), and claims (14%). The majority of the respondents (62%) held management positions at the time of the survey. The size of the respondents' employers demonstrates a relatively even spread across the potential spectrum. Only 20% of the respondents report a reduction in professional development support within their organization over the previous five years.

Question I: What skills and attributes are important?

Question I seeks to establish an ordinal ranking of importance among the skills and attributes presented to the respondent. Using a Likert-scale format, respondents were asked to assign a value to each of the items based on the importance of the specific skill/attribute where "1 = Of no importance at all" and "7 = Of the utmost importance." Table 2 includes a summary of the results, presented in rank-order based on the mean value of the associated distribution.

The results of Table 3 suggest that all skills and attributes included on the list possess at least some level of positive value to the industry. Given that the items on the list were the identified from a review of earlier related research, this finding is not surprising. Survey results suggest the most important attribute is a recent graduate's predisposition to make ethical decisions. While the issue of ethics has become a focal point for many industries in recent years, these survey findings may be indicative of a focused, longer-term, effort on the part of the insurance industry to enhance the public's generally negative perception of the industry. Recent Gallup polls have repeatedly found that the public harbors a significant distrust of the insurance industry.[9] Also receiving high value estimates were graduates' ability to communicate and employ critical thinking. While these findings may be of interest, they are not significantly different from the findings of previous research that canvased industries more broadly – it would seem that communication skills and critical thinking are almost universally valued. Arguably, the finding of most interest is that a graduate's knowledge of the fundamentals of insurance is found to be the *least* important attribute on the list.[10] That said, respondents generally agree that an RMI degree (as opposed to another major) stands as the best preparation for an insurance career. Taken together, these findings suggest that while RMI degrees are perceived to be the "best" preparation for a career in insurance, such preparation is not necessarily valued as highly as any number of other personal skills/attributes.

The relative lack of value the insurance industry places on an RMI degree should be of interest to those responsible for RMI programs. If RMI degrees represent (relatively) less value to prospective employers, why should a student choose an RMI major? The choice of an alternative major would seem to provide a similar level of access to the insurance industry while simultaneously providing a broader set of career opportunities. The

[9] See for example, the results of the 2012 Gallup poll surveying the public's perception of the honesty/ethics among various professions (www.gallup.com/poll/1654/honesty-ethics-professions.aspx).
[10] It is important to remember that this finding does not mean that such knowledge is not important (indeed, the mean value for this attribute was higher than a neutral value of four on the seven point Likert-scale) but rather, its value is the least among the alternatives presented to the respondents.

ability of RMI programs to provide a positive response to that question would seem to be critical in convincing students that an RMI degree has relatively more value than other academic major alternatives if one were intent upon choosing a career in insurance.

Table 2. What Specific Skills and Attributes are Important?

	Skill/Attribute	Mean	Median	Mode	Skew
1.	Predisposition to make ethical decisions	6.5	7	7	2.04
2.	Oral communication skills	6.4	7	7	1.28
3.	Written communication skills	6.3	6	6	0.96
4.	Critical thinking skills	6.2	6	6	1.00
5.	Knows how to manage his/her time	6.1	6	6	0.72
6.	Shows initiative	6.1	6	6	0.74
7.	Interpersonal skills	6.0	6	6	0.81
8.	Analytical/problem solving skills	6.0	6	6	0.87
9.	Adaptability to different business situations	6.0	6	6	0.79
10.	Proficiency in computer skills	5.9	6	6	0.33
11.	Ability to seek out and analyze information that will lead to new insights	5.9	6	6	1.10
12.	Demonstrated teamwork skills	5.7	6	6	0.77
13.	Works well within groups	5.7	6	6	0.62
14.	Organizational skills	5.7	6	6	0.62
15.	Creativity in finding solutions to a problem	5.6	6	6	0.77
16.	Leadership skills	5.0	5	5	0.86
17.	Knowledge of fundamental insurance concepts	4.9	5	4	-0.19

Question II: How well prepared are new graduates?

While Question I above asked respondents to assign a value to a given attribute, Question II assesses the industry's perception of the degree to which graduates possess, or have mastery over, a given attribute. Once again employing a seven-point Likert-scale system where the extremes on the scale are anchored by 1 = Strongly disagree and 7 = Strongly agree, respondents are instructed to indicate their level of agreement with 17 statements alluding to the graduate's mastery, or possession, of various attributes. Using a rank-order presentation based on the mean value of the respondents' assessments, the results are presented in Table 3.

It is apparent that the insurance industry is most impressed (by a significant margin) with the computer skills of recent graduates. Respondents also cited the strength of the ethical predisposition of recent graduates as well as their ability to work in groups. Conversely, writing communication and leadership skills were identified as relatively less well-developed attributes among new graduates. Despite claims from some corners that liberal arts degrees better prepare college students for the rigors of professional careers (AACU, 2013), the respondents

in this survey would seem to be neutral on that sentiment (Table 3, item 19). Indeed, the results of this survey would suggest that the respondents are more inclined to think that degrees in related business disciplines better prepare students for a career in the insurance industry (Table 3, item 8) and students with RMI degrees are the best prepared for careers in insurance (see item 2 in Table 3).

Table 3. How Well Prepared are New Graduates?

	Skill/Attribute	Mean	Median	Mode	Skew
1.	Recent hires and job candidates have excellent computer skills	6.0	6	6	1.16
2.	Students with an insurance degree are better prepared for insurance career vs. those with other degrees	5.3	6	6	0.42
3.	Recent hires and job candidates can be counted on to act ethically in situations	5.2	5	6	0.41
4.	Recent hires work well within groups	5.2	5	5	0.89
5.	Recent hires demonstrate initiative when completing job assignments	5.1	5	5	0.76
6.	Teamwork skills demonstrated by recent hires and job candidates are well developed	5.0	5	5	0.73
7.	Interpersonal skills and the ability to relate well to others are well developed in recent hires and job candidates	4.9	5	5	0.49
8.	A degree in a business discipline better prepares students for an insurance career vs. other degrees	4.9	5	5	0.40
9.	Recent hires and job candidates have excellent oral communication skills	4.8	5	5	0.97
10.	Recent hires and job applicants have excellent analytical/problem-solving skills	4.8	5	4	0.70
11.	Critical thinking skills by recent hires and job candidates are well developed	4.7	5	5	0.55
12.	Seeking out and analyzing information that leads to new insights is a strength of recent hires and job applicants	4.7	5	4	0.61
13.	Recent hires and job applicants have excellent organizational skills	4.7	5	4	0.73
14.	Recent hires and job candidates are able to adapt to different business situations	4.7	5	5	0.47
15.	Knowing how to manage his/her time is a strength of recent hires and job candidates	4.6	4	4	0.15
16.	Creativity in finding solutions to a problem is a strength of recent hires and job applicants	4.6	4	4	0.63
17.	Leadership skills demonstrated by recent hires and job candidates are well developed	4.3	4	4	0.93
18.	Recent hires and job candidates have excellent written communication skills	4.3	4	5	0.15
19.	Students with a liberal arts degree are better prepared for insurance career vs. those with other degrees	4.0	4	4	1.93
20.	Recent hires and job candidates have excellent knowledge of fundamental insurance skills	4.0	4	3	-0.20

While a knowledge of insurance was not found to be a relatively important attribute in Question I, it is interesting to note that the respondents strongly believe students with an insurance degree are better prepared for insurance career, relative to those with other degrees (see item 2 in Table 3). One possible interpretation of

those findings is that a foundation knowledge of insurance (presumably cultivated in an RMI degree) in a new hire is not deemed to be of critical importance however, new hires with RMI backgrounds are perceived to be in a better position to assimilate into the firm more quickly.

Comparative Analyses of Questions I and II

Table 4 presents a rank ordered comparison of attributes of the results from Tables 2 and 3.[11] Comparing the respective rank values, a few observations immediately emerge. First, an ethical predisposition is highly valued by industry and respondents believe recent graduates are strong in this respect. This represents a significant positive for RMI programs. Conversely, two conflicts are also evident. While relatively highly valued, both written communication skills and time management abilities suffer from relatively low levels of perceived mastery.

Table 4. Comparative Ranking Analysis

Skill/Attribute	Question I: Importance	Question II: Performance
1. Ethical Decision Maker	1	2
2. Oral Communication Skills	2	6
3. Written Communication Skills	3	14
4. Critical Thinking Skills	4	8
5. Time Management	5	12
6. Shows Initiative	6	3
7. Interpersonal Skills	7	5
8. Analytical/Problem Solving Skills	8	7
9. Adaptability	9	10
10. Computer Skills	10	1
11. Curiosity/Seeks out Information	11	9
12. Team Work Skills	12	4
13. Organizational Skills	13	10
14. Creative in Solution Finding	14	12
15. Leadership Skills	15	15
16. Insurance Concept Knowledge	16	16

Perhaps most interesting, given the focus of this research, is the lack of general value respondents ascribe to a previous knowledge of insurance (i.e., possession of an RMI degree) *and* the correspondingly low assessment of recent graduates' understanding of insurance. Given that the significant majority of new hires in the insurance industry enter without RMI degrees, the perceived lack of insurance knowledge of these young employees is understandable. Yet, despite the fact that an RMI degree would likely significantly enhance a new hire's familiarity with insurance operations, that background is only relatively weakly valued as a personal attribute.

One possible reason for these perceptions could be that, accustomed to hiring non-RMI degree candidates, prospective employers have developed existing training programs designed to facilitate that

[11] Three questions imbedded in Table 3 that specifically ask for comparisons of preparation for careers in insurance were deleted from inclusion in the comparison format in Table 4 because they have no direct counterpart in Table 2.

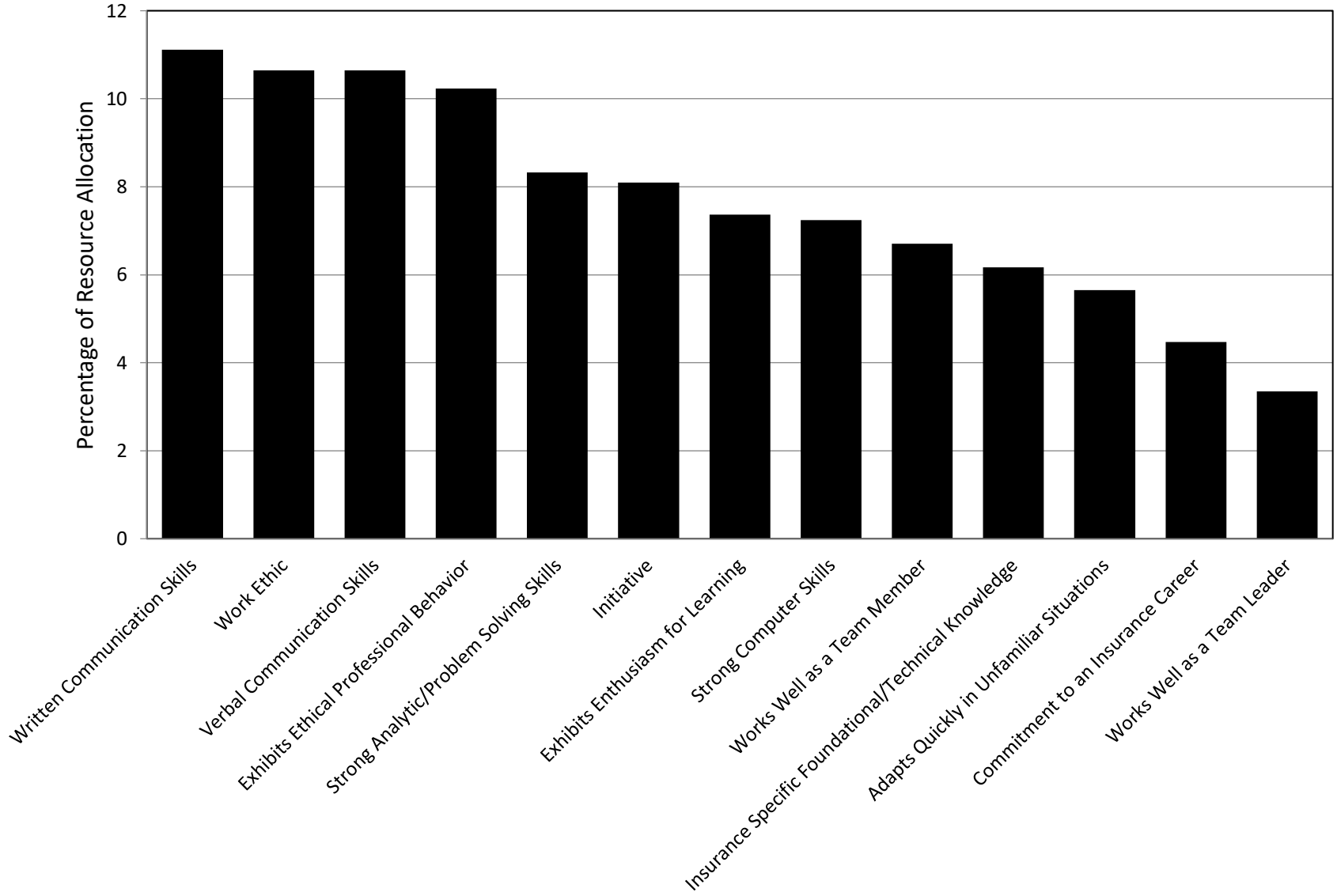
understanding in new hires; whether a new hire possesses an RMI degree or not, the training program exists as a fixed cost. Indeed, it is quite likely that all new employees, regardless of their academic background, are required to participate in such training as a means of ensuring some level of quality control of new employee knowledge of industry operations. In that light, the possession of an RMI degree might represent something of a value-added attribute that is "nice," but not "necessary."

Relative Importance among Identified Skills and Attributes

The third query presented to the respondents represents a unique contribution to the body of associated literature. While the initial query asks respondents to assign a value of importance to each listed attribute, that framework presents respondents with little in the way of constraints – other than a bounded scale of values. Question III however, asks respondents to make choices with a limited pool of resources from which allocations are made. Presented with the same array of attributes included in Question I, respondents are asked to allocate 100 points among the various alternatives. In doing so, the results reveal which attributes the respondent deems most (or least) critical for a graduate seeking employment in the insurance industry.

This method not only provides RMI programs and students with an understanding of the rank-importance of these attributes, but also an understanding as to the *relative* importance of RMI knowledge in an environment with limited resources. The results of this query are presented in a graphic format in Figure 1. Within this framework, written communication skills are identified as the most critical attribute and oral communication skills are third. Taken together, communication skills account for almost 25 percent of the allocable resources. This suggests that communication skills are, by a significant margin, the most meaningful skill set that the insurance industry wants in a graduate. Interestingly, ethical predisposition falls to the fourth position in this system; it had previously been identified as the preeminent attribute among the respondents in Question I. That said, work ethic rises to the number two position in this current framework - a clear sign that students should actively promote evidence of their work ethic when interviewing for employment. Also notable is that leadership is last within this framework. While leadership may be a highly desired attribute in an employee, it may not serve as a relatively important attribute in a *new graduate*. Rather, respondents may merely be looking for leadership *potential* in a young hire.

Figure 1. Relative Importance of Various Skills and Personal Attributes in a New Hire



Parametric Analysis of the Impact of Respondent Attributes

In an effort to uncover potential patterns and/or biases across respondent groups with differing profiles, we generated a series of parametric assessments of the data using *t*-tests of distribution means. Because this form of assessment requires a paired set of distributions for analyses, respondent attributes that include more than two possible alternatives, e.g., the number of years of industry experience, a certain degree of subjectivity is incorporated into the clustering strategies. For example, in our efforts to assess the effect of a respondent's age on their responses, we create a handful of generational comparisons, e.g., Baby Boomers (those over 54 years of age) versus Millennials (those younger than 34), Millennials versus Non-Millennials, GenX (those between the age of 34 and 55) and Baby Boomers versus Millennials, etc. Similar strategies are developed with respect to other respondent characteristics, e.g., functional role, years of experience, etc.

While this series of paired comparisons resulted in the identification of some differences (although not many) across various respondent attributes, those findings were largely sporadic and inconsistent in terms of patterns. That said, two respondent attributes were found to generate relatively more statistically different outcomes:

- Whether the respondent had the opportunity to work with an RMI graduate within the past five years.
- Whether the respondent held a management position.

Therefore, we limit our discussion of these comparative findings to these two respondent attributes (reported in Tables 5 and 6) and their potential implications. Table 5 addresses the perceived *importance* of various skills/attributes while Table 6 asks for the respondents' perception as to the degree to which new hires *possess mastery* over certain skills/attributes.

Interpreting the findings presented in Tables 5 and 6 is a two-fold process. First, the data presented reveals whether a given respondent attribute, e.g., the respondent's age, serves as a statistically significant differentiating characteristic in terms of the perceived value of a given new hire attribute. Second, the data also reveals the relative value respondents allocate to a given new hire attribute, relative to the value allocated to other attributes. Consider for example the perceived value of a knowledge of fundamental insurance concepts (item 13 in Table 5). The data in the "Work w/RMI Student" column reveals that respondents who have not had the opportunity to work with new hires with RMI degrees perceive such knowledge to be more valuable (by a statistically significant margin) than their counterparts who have had the opportunity to work with new hires with RMI degrees. While of potential interest, the fact that all respondents tend not to value a knowledge of fundamental insurance concepts (first revealed in Table 2 and reiterated her in Table 5) also holds implications. Thus, while respondents who have not previously worked with RMI graduates tend to allocate more value to a new graduate's knowledge of fundamental insurance concepts, the pool as a whole allocates relatively little value to that attribute. A similar set of dynamics exist when looking at the second respondent attribute, Management Position (column two in Table 5).

Deriving deeper meaning from the relationships revealed in the table is difficult. The character of the empirical analyses (parameter *t*-tests) does not allow for an assessment of causality. Thus, while tempting, one cannot say with any certainty that, for example, the relatively higher value non-management respondents attribute to a knowledge of fundamental insurance concepts is *because* of their lack of management experience. Rather, the analyses merely note the empirical relationship without further nuance.

Table 5. Respondent Assessment as to the Importance of Specific Skills: *t*-test Comparison†

Skill/Attribute	Work w/ RMI Student			Management Position		
	Yes (N=181)	No (N=190)		Yes (N=230)	No (N=141)	
1. Oral communication skills	6.36	6.48		6.41	6.45	
2. Written communication skills	6.07	6.42	***	6.19	6.35	
3. Adaptability to different business situations	5.90	6.04		5.95	6.00	
4. Knows how to manage his/her time	6.00	6.22	**	6.06	6.19	
5. Shows initiative	6.07	6.11		6.04	6.17	
6. Predisposition to make ethical decisions	6.43	6.58		6.44	6.60	
7. Leadership skills	4.91	5.08		4.90	5.15	*
8. Works well within groups	5.64	5.77		5.71	5.70	
9. Demonstrated teamwork skills	5.59	5.84	**	5.72	5.72	
10. Interpersonal skills	6.05	6.05		6.01	6.11	
11. Proficiency in computer skills	5.72	6.02	**	5.77	6.04	**
12. Critical thinking skills	6.12	6.26		6.17	6.23	
13. Knowledge of fundamental insurance concepts	4.72	5.08	**	4.69	5.25	***
14. Creativity in finding solutions to a problem	5.50	5.68		5.50	5.75	**
15. Organizational skills	5.50	5.82	***	5.57	5.82	**
16. Analytical/problem solving skills	5.88	6.16	**	5.97	6.12	
17. Ability to seek out and analyze information that will lead to new insights	5.77	5.94		5.83	5.90	

†Asterisks identify statistical differences across the two mean values presented, where:
*** statistically significant at 0.01; ** statistically significant at 0.50; * statistically significant at 0.10.

Whereas Table 5 focused on the perceived importance of various new hire attributes, Table 6 addresses the degree to which the respondents believe new hires possess or have mastery over certain skills and/or attributes. For the sake of consistency, the same respondent attributes used in Table 5 are used in Table 6. While Table 6 presents a number of statistically significant findings, our interest in the importance of an insurance background for new hires draws our attention to item 15 in the table. As previously revealed in Table 3, the respondent pool is generally not impressed with the knowledge of fundamental insurance skills among new graduates. Table 6 (item 15) reveals that respondents with management positions are even less impressed (by a statistically significant margin) with the level of knowledge of fundamental insurance skills of new hires than their non-management counterparts.

Table 6. Respondent Perception of Skill Development: *t*-test Comparison †

Statement	Work w/ RMI Student			Management Position		
	Yes (N=181)	No (N=190)		Yes (N=230)	No (N=141)	
1. Recent hires and job candidates have excellent oral communication skills	4.78	4.84		4.70	4.99	*
2. Students with a liberal arts degree are better prepared for insurance career vs. those with other degrees	3.73	4.27	***	3.74	4.45	***
3. Recent hires and job candidates have excellent written communication skills	4.25	4.36		4.13	4.59	***
4. Recent hires and job candidates are able to adapt to different business situations	4.50	4.80	**	4.60	4.75	
5. Knowing how to manage his/her time is a strength of recent hires and job candidates	4.49	4.74		4.47	4.86	**
6. Recent hires demonstrate initiative when completing job assignments	5.02	5.08		4.98	5.17	
7. Recent hires and job candidates can be counted on to act ethically in situations	5.17	5.28		5.22	5.23	
8. Leadership skills demonstrated by recent hires and job candidates are well developed	4.16	4.49	**	4.17	4.58	**
9. Recent hires work well within groups	5.15	5.26		5.17	5.26	
10. A degree in a business discipline better prepares students for an insurance career vs. other degrees	4.81	4.95		4.84	4.94	
11. Teamwork skills demonstrated by recent hires and job candidates are well developed	4.93	5.10		4.96	5.11	
12. Interpersonal skills and the ability to relate well to others are well developed in recent hires and job candidates	4.79	5.02		4.84	5.01	
13. Recent hires and job candidates have excellent computer skills	5.94	6.11		5.95	6.15	*
14. Critical thinking skills by recent hires and job candidates are well developed	4.65	4.83		4.67	4.86	
15. Recent hires and job candidates have excellent knowledge of fundamental insurance skills	3.88	4.02		3.78	4.23	**
16. Creativity in finding solutions to a problem is a strength of recent hires and job applicants	4.54	4.67		4.59	4.64	
17. Recent hires and job applicants have excellent organizational skills	4.55	4.77		4.53	4.88	**
18. Recent hires and job applicants have excellent analytical/problem-solving skills	4.65	4.85		4.65	4.93	*

19.	Students with an insurance degree are better prepared for insurance career vs. those with other degrees	5.33	5.31	5.28	5.38
20.	Seeking out and analyzing information that leads to new insights is a strength of recent hires and job applicants	4.73	4.74	4.71	4.78

†Asterisks identify statistical differences across the two mean values presented, where:
*** statistically significant at 0.01; ** statistically significant at 0.50; * statistically significant at 0.10.

A number of other statistically significant differences are apparent in the table however, the implications of those findings are muted given the lack of control for causality. That limitation of the findings highlights the potential for further selective analysis of these significant relationships using methodologies that allow for the control of causality; it would be the next step in an analysis of these relationships.

SUMMARY AND IMPLICATIONS

This research queried insurance industry professionals regarding the relative value of various attributes possessed by new graduates when seeking employment in the industry. The research makes two specific contributions to the extant literature. First, it updates the only previous investigation (executed almost two decades ago) as to the importance the insurance industry places on a variety of skills and attributes of recent college graduates. Second, in addition to the more traditional ordinal rankings that are common in such surveys, this research employs a variation that requires respondents to make choices between the values assigned to various attributes. In doing so, the results reveal the relative importance of attributes when choices must be made.

A handful of salient findings emerge from the research. Similar to the findings of a number of earlier reports on the general subject, attributes such as communication skills, ethical predisposition, work ethic, etc., are all highly valued by the insurance industry. Arguably, the most interesting finding is the relative *lack* of relative importance the industry ascribes to the importance of RMI degrees. While an education in RMI might best prepare a student for entry into the insurance field, such preparation was perceived to be of limited value by industry respondents. For relatively generic industry positions, prior academic knowledge of the industry's operations is simply not highly valued in new hires. While the potential demand for human capital in the insurance industry may reach historic levels within the next few years, funding cuts for academic RMI programs and weak interest in insurance careers by the Millennial population threatens the ability of RMI programs to take advantage of the industry's demand.

What this research *does* reveal is that the most direct way to meet the coming labor demands of the insurance industry is to develop graduates who communicate well, are willing to work hard, are predisposed to making ethical decisions, etc. While not *ir*relevant, the possession of an RMI degree does not represent a significantly important or defining attribute, relative to other attributes. An understanding of these dynamics is of critical importance to RMI programs, especially those with smaller enrollment. Given that the insurance industry expects to hire more than 80% of its workforce from academic programs other than RMI in the coming years, it simply does not expect or rely on new hires to begin work with a significant insurance background; the industry is already structured to accommodate that expectation. Given this understanding, RMI programs and their students would be well advised to critically contemplate the importance of relatively highly valued skills and attributes, e.g., communication skills, ethical predispositions, work ethics, etc. It is not that RMI education is irrelevant but rather, it should not be viewed as the seminal attribute upon which a student relies in preparation for the rigors of a search for employment in the insurance industry; it is more properly viewed as a value-added attribute.

Significant additional research opportunities exist related to this topic. As noted above, this research would benefit from an approach that focuses on specific relationships within a methodology that controls for causal relationships. Additionally, further control of respondent profiles is warranted. Consider for example the implications of a respondent's personal degree program and how might it influence the responses in a similar survey. Also, consider the implications related to geographic proximity to one of the few major RMI programs in the nation. Indeed, many opportunities for further investigation exist for further investigation of this important issue.

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APPENDICES

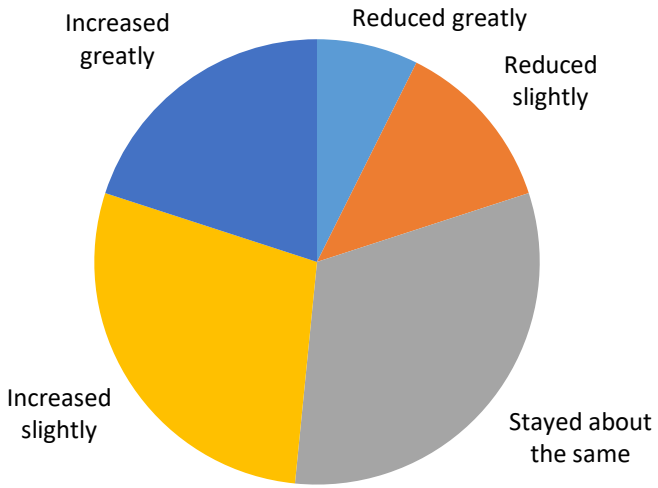
Appendix A: Respondent Profile

1. Within the last 5 years have you had the opportunity to work with a recent graduate who has a risk management or insurance degree?

Yes	49%
No	51%

2. How has professional development in your firm changed in the past 5 years?

Figure 2. Respondent Firm Professional Development



3. How many years of work experience do you have?

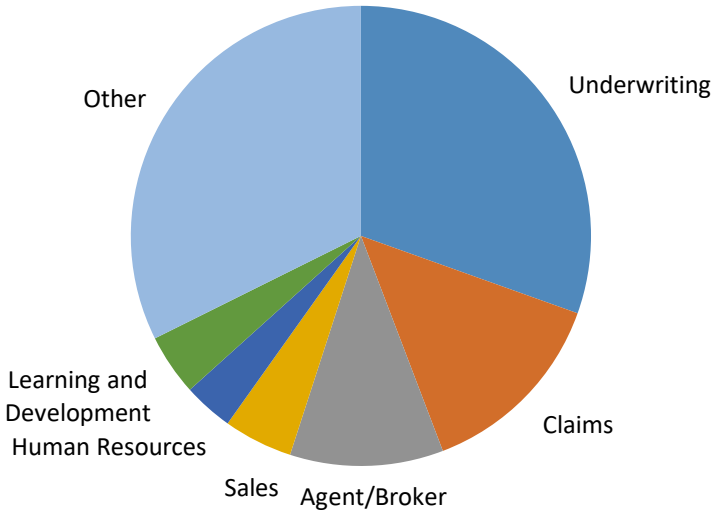
Mean	28
Std. Dev.	12

4. Years of insurance experience.

Mean	25
Std. Dev.	12

5. Please indicate your current functional area:

Figure 3. Respondent Functional Area

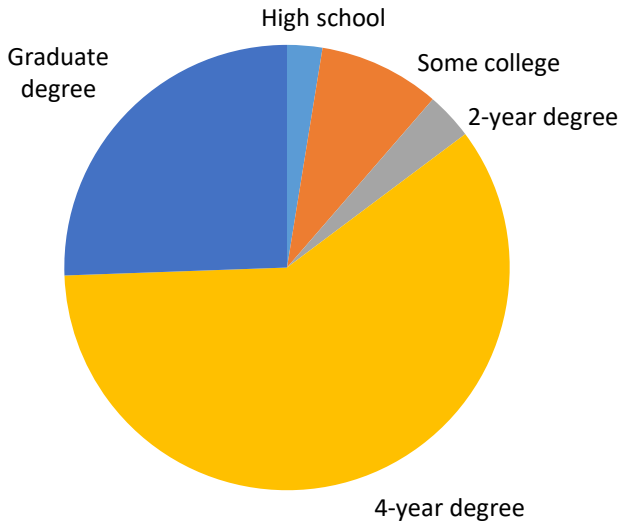


6. Are you currently in a management position?

Yes	62%
No	38%

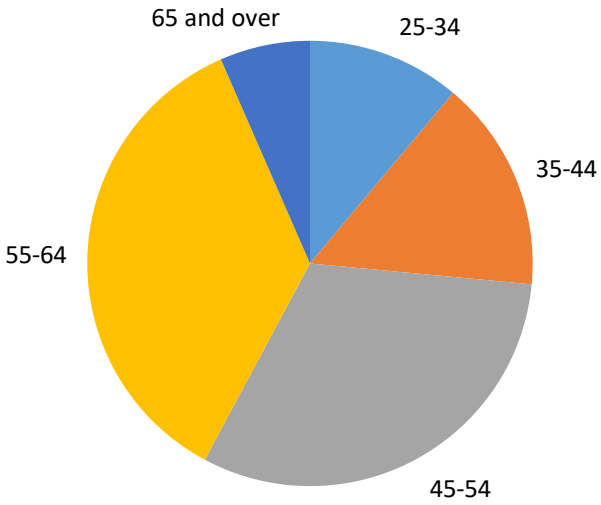
7. What is the highest level of education you have attained?

Figure 4. Respondent Education



8. What age range are you in?

Figure 5. Respondent Age Range

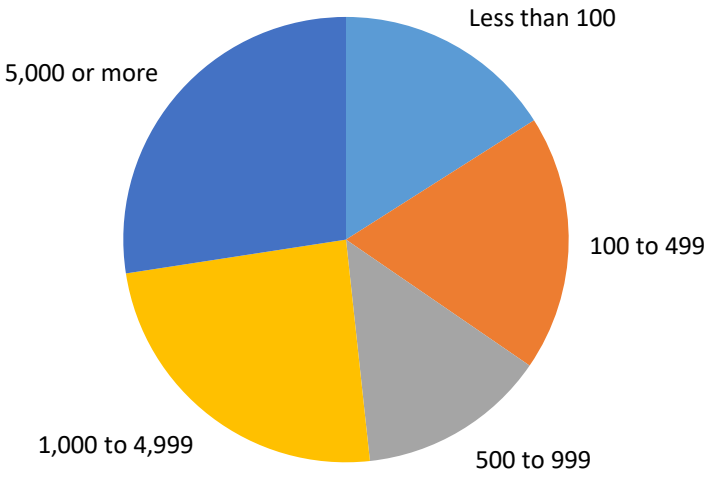


9. What is your gender?

Male	59%
Female	41%

10. Approximately how many full-time employees are there in your organization?

Figure 6. Size of Respondent Firm



Appendix B. Survey Questions

Question I - Please respond to the following items regarding the importance of specific skills and attributes of recently graduated new hires and job candidates in the insurance industry.

1. Oral communication skills
2. Written communication skills
3. Adaptability to different business situations
4. Knows how to manage his/her time
5. Shows initiative
6. Predisposition to make ethical decisions
7. Leadership skills
8. Works well within groups
9. Demonstrated teamwork skills
10. Interpersonal skills
11. Proficiency in computer skills
12. Critical thinking skills
13. Knowledge of fundamental insurance concepts
14. Creativity in finding solutions to a problem
15. Organizational skills
16. Analytical/problem solving skills
17. Ability to seek out and analyze information that will lead to new insights

Question II – Please indicate your agreement with the following statements regarding recently graduated new hires and job candidates in the insurance industry.

1. Recent hires and job candidates have excellent oral communication skills
2. Students with a liberal arts degree are better prepared for insurance career vs. those with other degrees
3. Recent hires and job candidates have excellent written communication skills
4. Recent hires and job candidates are able to adapt to different business situations
5. Knowing how to manage his/her time is a strength of recent hires and job candidates
6. Recent hires demonstrate initiative when completing job assignments
7. Recent hires and job candidates can be counted on to act ethically in situations
8. Leadership skills demonstrated by recent hires and job candidates are well developed
9. Recent hires work well within groups
10. A degree in a business discipline better prepares students for an insurance career vs. other degrees
11. Teamwork skills demonstrated by recent hires and job candidates are well developed
12. Interpersonal skills and the ability to relate well to others are well developed in recent hires and job candidates
13. Recent hires and job candidates have excellent computer skills
14. Critical thinking skills by recent hires and job candidates are well developed
15. Recent hires and job candidates have excellent knowledge of fundamental insurance skills
16. Creativity in finding solutions to a problem is a strength of recent hires and job applicants
17. Recent hires and job applicants have excellent organizational skills
18. Recent hires and job applicants have excellent analytical/problem-solving skills
19. Students with an insurance degree are better prepared for insurance career vs. those with other degrees
20. Seeking out and analyzing information that leads to new insights is a strength of recent hires and job applicants
21. What deficiencies do you typically see in your newly hired insurance professionals that might keep them from maximizing their success?

Question III - What attributes are most important in a recent graduate? Please allocate 100 points among the categories below, giving more points to attributes you perceive to be of relatively more importance.

1. Written Communication Skills
2. Exhibits Ethical Professional Behavior
3. Works Well as a Team Member
4. Exhibits Enthusiasm for Learning
5. Verbal Communication Skills
6. Strong Analytic/Problem Solving Skills
7. Adapts Quickly in Unfamiliar Situations
8. Strong Computer Skills
9. Works Well as a Team Leader
10. Insurance Specific Foundational/Technical Knowledge
11. Commitment to an Insurance Career
12. Initiative
13. Work Ethic

The Structure and Utilization of Advisory Boards at U.S. Risk Management and Insurance Programs

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INTRODUCTION

A majority of Colleges of Business in the United States have established advisory boards[12] for a variety of reasons. Of the 194 colleges surveyed, Ellingson et al. (2010) find that 98.5 percent had a Business Advisory Council. Contributions of a University, College, or Department advisory board can include, but are not limited to:

- Participation in the classroom experience by providing guest speakers, evaluating student projects and/or presentations, etc.
- Addition of credibility or status to the program and assist in publicizing the program to potential constituents.
- Provide insight into hiring trends or changing skill sets needed for future college graduates.
- Lobby activities on behalf of the program being advised.
- Hiring graduates or providing leads on internship and career opportunities.
- Provide financial gifts or assist with fundraising.
- Bring current trends and hot topics to the attention of faculty (Penrose, 2002)

According to BusinessDictionary.com, an advisory board of directors consists of:

Individuals appointed to offer expert advice to the elected board of directors. Neither they are bound by the legal duties imposed on the elected board members, nor is the elected board bound by their recommendations.

A similar distinction applies in academia where advisory boards are different from governing boards. Advisory boards commonly focus on offering advice, fundraising, program development and institutional engagement (Munir, et al., 2015).

The need for Risk Management and Insurance programs to develop support from the business/professional community is well-known. In a 1992 address to the American Risk and Insurance Association annual meeting, Dr. William Rabel mentions this necessity for program success. This seminal ARIA speech, titled "A Manual on How to Manage an Effective Collegiate Program in Risk Management and Insurance," is still used as a template for both new and mature RMI programs. In the manual's section on developing support from the business/professional community the following is mentioned:

> *Form one or more advisory councils. A council should have a mission statement that reflects the interests of the RMI community, as well as academe. Make sure your program has a close liaison with and support from every constituency available in the business and professional communities, including, but not limited*

[12] While we use the term "Advisory Board" throughout this paper, it is important to note that this refers to an advisory council which serves in an advisory-only capacity. It is not to be confused with a Board of Directors, Board of Regents, or other authoritative decision-making bodies.

> *to, company executives, producers, risk managers, consultants, employee benefit firms, banks, and third party administrators.*

The section goes on to state:

> *Never call a meeting without an agenda or a purpose. Intelligent people are quick to see if they are being used as "window dressing." At the same time, never be reluctant to ask for help if something important can be achieved – and always be sure you do everything you say you will do.*

Business advisory boards at American colleges have become increasingly prevalent because of the need to maintain a competitive advantage and remain relevant while preparing students for real-world issues and challenges. Another purpose of such an advisory group is to contribute to the standards set by accreditation agencies such as the Association to Advance Collegiate Schools of Business (AACSB). An academic advisory board can represent an entire school or college of business, a department, a specific discipline, or an on-campus business institute/center of study. The broad purpose of the board is the application of their experiences to address strategic planning within specific academic areas of the institution.

Many academic departments have advisory boards comprised of individuals who have a natural interest in the department's academic area and other stakeholders. A successful board serves more than just a "who's who" list of accomplished executives for purposes of department publicity or window dressing. An effectively utilized department advisory board can provide a practical and functional organization for developing relationships with department alumni and other outside individuals who would have an interest in supporting the mission of an academic department.

Advisory boards encourage reciprocity between universities and the private sector. They dispense valuable advice to deans about the organizational mission, business trends, community relations, and fundraising opportunities. Advisory boards help faculty by cultivating friendships with the community and by serving as curriculum advisors. They serve students by providing guest speakers, internships, and jobs. In addition, according to analysis by Karl and Wells (2016), "one effective method for improving the reputation of the insurance industry is to facilitate a setting where participants can be provided with detailed information on various aspects of the industry, including its merits, potential career opportunities, and career satisfaction." Advisory Boards with members from industry can be an important component in promoting and enabling frequent contact points with students. At its core, advisory boards can serve to bridge the gap between the academic world and the workplace.

Using a survey tool sent out to universities with risk management and insurance programs consisting of an RMI concentration or emphasis, RMI minor, RMI major at the undergraduate and or graduate level, this paper discusses current practices of risk management and insurance program advisory boards, including board structure, location and frequency of board meetings, the relationship with RMI faculty, and purpose of the advisory group. The discipline-specific advisory board study that is closest to RMI programs may be Avila, et al. (2005) which focused on the steps recommended in creating and developing an advisory board for finance programs. While there may be some general similarities between finance programs and risk management and insurance programs, differences also exist. In addition, while previous studies have focused on the prevalence of boards, and the composition of board members, there is little research on the utilization of business advisory councils or specialized programs that have similar boards.

As noted in the Literature Review section, studies of other specialized departments and disciplines such as accounting, hospitality, information systems, and centers of excellence have been conducted. This study adds to that stream of literature since to our knowledge, risk management and insurance programs have not been the subject of a targeted advisory board study. The history of current RMI programs range

from as early as the 1940s to less than a year old at the time of this study. The number of RMI programs that are no longer in existence is notable as well. Instead of relying solely on word of mouth and informal conversations at academic and industry meetings among faculty regarding such program options as the utilization and structure of advisory boards by risk management and insurance programs has not been conducted to the authors' knowledge.

A number of RMI programs have been established at various universities over the past decade. By sharing information about advisory board usage, these newer programs can learn what is effective in getting the most out of their advisory boards. For those RMI programs that have not established an advisory board, the results of this survey may provide additional relevant information as to whether or not an advisory board should be considered for their situation. Even mature RMI programs with a 20- to 50-year history may find the survey results useful as a benchmark for evaluating their current RMI advisory board strategy.

Accreditation organizations are placing increased emphasis on the presence of advisory boards. The Association to Advance Collegiate Schools of Business (AACSB) is an association of the world's best business schools and the most powerful and influential voice for business education. Schools that are AACSB-accredited produce the best graduates and the best scholarship to meet the needs of business worldwide. (AACSB, 2006).

In recognition of the importance of the partnership with industry and business schools, the AACSB International Board of Directors established a task force, the Alliance for Management Education (AME), to explore possibilities that might appropriately be coordinated by AACSB International and could work to the benefit of both entities. This Task Force included leaders from the corporate world as well as business schools. The AME efforts resulted in the development of a position statement and identifiable courses of action. Although this report is U.S. focused and doesn't fully represent worldwide perspectives, it is acknowledged that the significance of a heightened partnership between business schools and business is a global challenge necessitating global action (AACSB, 2006).

Four primary challenges were identified using a combination of task force deliberations, focus group interactions, and other discussions. Emphasizing these challenges, according to the AACSB, establishes the basis for a cooperative relationship between business schools and businesses. These Four Key Challenges are: 1. Targeting and Teaching the Right Things; 2. Optimizing Business School Research; 3. Keeping up with the pace and challenge of globalization; 4. Increasing the engagement of business in business schools and business schools in business. Within this fourth challenge, it was expressed that opportunities to enhance cross communications are still too limited. **According to the report, "At the individual school level, advisory boards provide excellent opportunity for business input related to a school's unique challenges."** (AACSB, 2006).

LITERATURE REVIEW

Numerous papers and studies have been conducted on advisory boards or corporate board of directors, including the impact of inside versus outside directors. A number of studies have also examined various aspects of advisory boards at academic institutions, including both those at the university-wide and at the college level (such as colleges of business). Little, et al. (2000) develop a marketing strategy for increasing advocacy among business board members for a college of business. Kaupins and Coco (2002) surveyed 114 business school administrators from Association of Collegiate Business Schools and Programs. In their study they investigate business school administrator perceptions of business school advisory boards concerning age, size, nomination and selection process, length of terms, meeting frequency and primary roles. In a survey of over 1,600 business faculty from 395 AACSB-accredited schools, Kilcrease (2011) assessed faculty opinions about business advisory boards. According to survey results, the vast majorities of faculty were not directly involved with their business advisory boards, but they received

updates through documentation and administrative feedback. Ireland, et al. (1994) define a process used by one business school's advisory board to identify critical environmental trends, providing school faculty the information needed to design an effective and relevant business curriculum. Dorazio (1996) describes the benefits to various stakeholders such as students, the program, and advisory board members. According to Dorazio, any professional advisory board is most effective when joint discussion and decision-making take place. Feedback is heard and responded to, and two-way communication is opened, thereby recognizing successes along the way.

Over the last few years there has been an increase in advisory boards formed at the departmental or disciplinary level, which has resulted in a corresponding increase in research studying those boards. Conroy, et al. (1996) surveyed 108 two- and four-year hospitality programs and found that 42 out of 50 four-year schools had advisory boards, and all but one of the 58 two-year programs had such a panel. French (2010) cites the benefits of an advisory board to academic departments which include serving as fundraising, classroom guess speakers, and providing guidance to faculty members and department chairpersons. In an article addressing the formation and governance of a department of marketing advisory council, Andrus and Martin (2007) discussed some caveats and pitfalls associated with developing and managing an advisory council, and outlines an innovative approach for building trust and commitment with advisory council members. In a study of faculty members' perspectives regarding the goals and achievements of their Information Systems advisory boards, Sena et al. (2010) researched the extent to which faculty agree or disagree that ten specific items serve as major goals for their advisory boards. The respondents also provided perspectives on the success of their boards along those same dimensions as well as the overall perceived success of the board. In a nationwide survey of accounting department chairs, Baker, et al. (2007) find that 64 percent have advisory boards, with a median size of 15 members. They also find that few departments require financial commitments from board members, and most are alumni. The primary activities of accounting advisory boards, according to survey results, were curriculum review, strategic planning, and providing internship opportunities for students. Based on an in-depth study of four advisory boards in U.S. colleges that offer Information Systems (IS) programs, Munir, et al. (2015) provides archetypes that encapsulate different models for implementing advisory boards and best practices.

An increasing number of colleges of business have Centers of Excellence or Academic Centers housing innovative programs in a variety of areas. For example, St. John's University houses the Center for the Study of Insurance Regulation, the Florida Catastrophic Storm Risk Management Center is housed at Florida State University, and the Center for Risk Management and Insurance Research is located at Georgia State University. A study by Zahra, et al. (2011) considers advisory boards with a focus on Entrepreneurship Centers. Cluster and discriminant analyses by the study reveal that boards tend to be either a ceremonial hands-off type or more hands-on and engaged. In a comparison of corporate governance boards, Zahra et al. find that while the monitoring function of corporate boards is underpinned by agency theory, the logic of agency theory holds some applicability to advisory boards. Some advisory boards can be viewed, either informally or formally, as fulfilling a monitoring role by acting as a guardian of learning and research quality and impact.

METHODOLOGY

The survey was created using SurveyMonkey, an online survey development cloud-based software. SurveyMonkey provides customizable surveys, as well as back-end programs that include data analysis, sample selection, bias elimination, and data representation tools. We developed a list of RMI programs from such sources as the American Risk and Insurance Association, Western Risk and Insurance Association, International Risk Management Institute, Southern Risk and Insurance Association, and lists of RMI programs in trade publications. Kwon (2015) was also a source of U.S. risk management and insurance programs. In addition, we included universities that had chapters of Gamma Iota Sigma, the

professional collegiate fraternity for students interested in international risk management, insurance, and actuarial science. A list of responding universities can be found in Appendix A.

To our knowledge, no university with a single or two RMI classes AND an RMI advisory board exists. If one did exist, we would want them to participate in the survey. The directories selected may include schools without a RMI major, minor, or emphasis. However, the number of current RMI programs continues to be a moving target, and we preferred to err on the side of inclusiveness. If the university only had a couple of classes or no program at all, we trusted that they would not participate in the survey. We did personally check the programs that responded and notified us that they did not currently have an advisory board. All of those programs offered an RMI major.

We identified, and sent emails to, individuals from each of the universities inviting them to participate in the survey or forward the email to the appropriate person to respond on behalf of their university. This was done to avoid multiple responses from a single university. We received 46 unique responses from the original list of 83 schools, a raw response rate of 55 percent. This response rate is likely significantly understated, as not all of the universities on our list may have active RMI programs. Specifically, it appears a number of schools have relatively new chapters of Gamma Iota Sigma, without an accompanying formal RMI program. In fact, two schools did explicitly reply to inform us that they no longer offered an RMI program. In addition, even though those contacted were encouraged to fill out the first few questions whether or not they had a current advisory board, it is not unreasonable to expect that some of those in this category simply skipped the survey altogether.

The questionnaire was intentionally limited in scope, in order to increase the rate of response given our relatively small population size of RMI programs in the United States. The survey itself can be found in Appendix B.

RESULTS

Among the 46 responses, 38 indicated that they currently have an advisory board. Among the eight who do not currently have an advisory board for their RMI program, two are considering forming one within the next three years and six are not considering it. Table 1 below summarizes selected quantitative statistics collected from the survey responses.

Table 1 – Summary Statistics

	Number of RMI Students	Number of Board Members	Percentage of Meetings Held on Campus	Percentage of RMI Faculty Involved with Board	Total RMI Faculty *
MEAN	319.3	20.8	67.4	70.8	4.6
MEDIAN	200.0	21.7	85.0	100.0	2.0
STDEV	306.3	10.7	37.6	35.9	7.2
MIN	32	3	0	0	1
MAX	1292	40	100	100	16
N	40	35	36	36	41

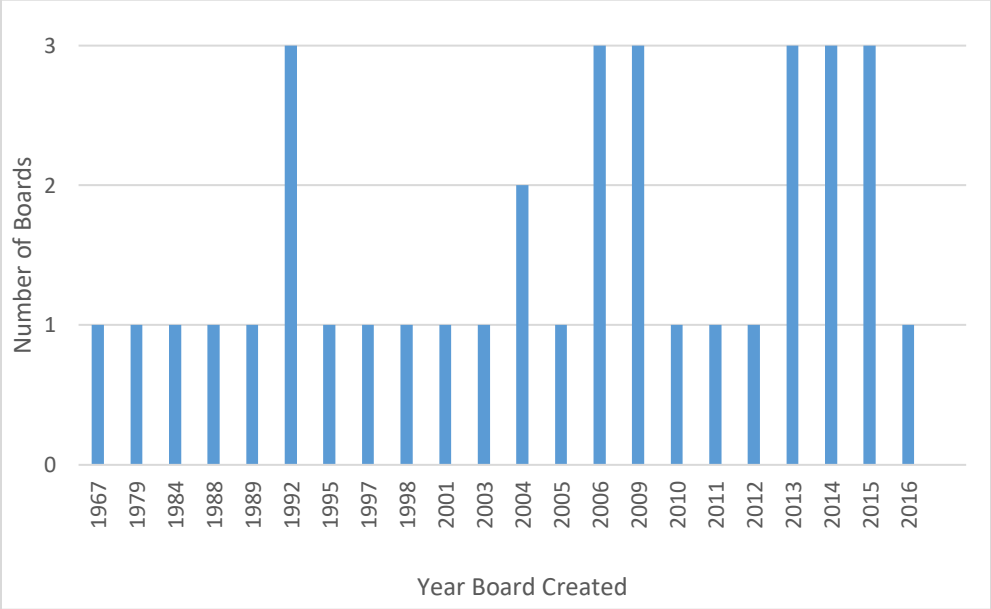
* Includes tenured/tenure track, college or clinical track, and adjuncts.

Chart 1 below provides the year an advisory board was started, or in at least one case, restarted at RMI programs that responded to the survey. While RMI advisory boards have been around since at least the 1960-70s, a significant number have been created in the last decade. This is not entirely surprising, as

a number of new RMI programs have been developed at various universities in the U.S. during that same time frame. Another possible reason is that some of the relatively new programs are seeing the benefits of having an advisory board either through their RMI peers, or from contact with other disciplines at their own university.

Chart 1

History of RMI Advisory Boards



All but three of the responding schools are AACSB-accredited. Interestingly, those three schools do have advisory boards. Eleven schools offer undergraduate minors, 27 have undergraduate RMI majors, and two offer RMI studies at the masters' level. Regarding the size of programs by number of students taking RMI classes during the school year, the number ranged from 32 to 1,292 students, with a mean of 286 students and a median of 200 students.

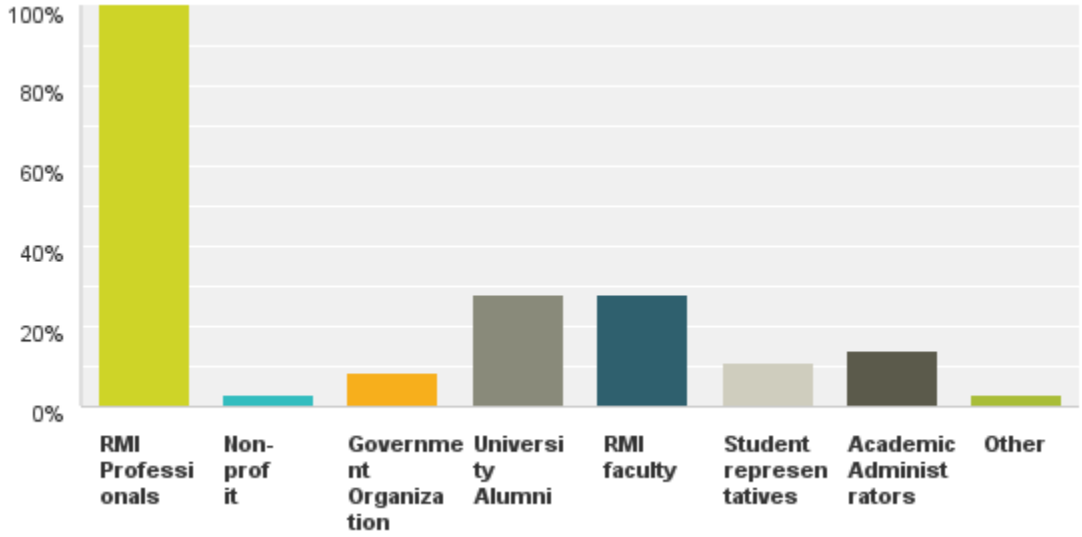
The size of the advisory board by number of members varied in a range of 3 to 55 members, with a mean board size of 21 members and a median of 22 members. When asked how often their board meets, they ranged from "irregular, once a year, or as needed" to "quarterly" although a few responses indicated that their boards have sub-committees that may meet more often or between full board meetings. More than half the boards reported on the survey (20/38) meet twice a year.

The chart below illustrates the make-up of board members. Since a board member may fall under more than one category, the percentages total more than 100 percent. There were a few categories with somewhat surprising results, as over 11 percent had student representatives and slightly less than 28 percent of the board was made up of alumni.

Chart 2

Advisory Board Composition

(Percentage of Boards with Members in Each Category)



Using the Mississippi River as a de facto dividing line, we put respondents into one of two groups on a geographical basis – "East" or "West." Thirteen programs responding to the survey are in the western U.S., while 25 programs are in the eastern half of the country. As expected, the western programs have had advisory boards for a shorter period of time, averaging about 8½ years in age. The earliest one in that group was formed in 1992 and two were created in 2015. The advisory boards of eastern schools have an average age of 15 years. The oldest advisory boards in that group were formed in 1967 and 1979, although there are also boards that were started in 2014 and 2015 in the eastern group. If one looks at the history of RMI programs, many of the older and more established programs can be found in the northeastern, southeastern, and Midwestern parts of the U.S. A greater number of the relatively newer programs can be found in the southwest, mountain states, and western parts of the country. The eight responding programs without an advisory board are evenly split, with four located in the west and four located in the east. Again, there are exceptions to these generalizations in both regions.

Programs were also divided by number of students enrolled in their RMI classes and electives, in an attempt to gauge program size and board formality, as observed in Table 2 below. Using 200 students as the dividing line among those who answered this question, the 16 "larger" schools had an average total enrollment of 470 students, while the 18 "smaller schools' average enrollment was 138 students. We find a slightly larger percentage of smaller programs using a more formal structure when compared to the board formality of large programs. This result was somewhat unexpected. One possibility is that the smaller programs are less established and may be placing a relatively greater emphasis on increasing student enrollment. By creating a board with specific criteria and a formalized strategic plan, they are implementing the necessary steps toward a sound foundation on which to grow their respective programs.

Table 2 – Board Formality by Program Size

	Does your board have formal Officers		Does your board have a formal set of By-Laws, Mission Statement, and/or Strategic Plan	
	YES	NO	YES	NO
Small Program	40%	60%	62%	38%
Large Program	36%	64%	50%	50%

When queried as to whether the advisory boards have a formal set of By-Laws, Mission Statement, and/or Strategic Plan, eighteen of the respondents answered in the affirmative, two are developing such a formal structure, and eleven have not created such formal documents. An example of Bylaws is found in Appendix C.

Other interesting results concerned the advisory board structure with respect to responsibility. Selection of new board members was shared by current board members and faculty/program directors at 41 percent of boards. Another 41 percent place that duty with faculty/program directors, and 18 percent task current board members with selecting new members. As far as who conducts RMI advisory board meetings, 18 percent utilize shared governance between board members and a faculty/program director, 59 percent of board meetings are administered by the faculty/program director, and 24 percent have a current board member(s) running the meetings.

Seven universities require monetary donations from their RMI advisory board members. A few of those who do not currently require monetary support for their programs are considering some type of policy in the future. We did find a wide variety of creative ways some schools address this issue, including:

- Each Board member, except students and "young professional" members, are expected to contribute $300.00 per year to the RMI Excellence Fund, which is used exclusively for fees and travel expenses for students to attend professional meetings, conferences and seminars.
- Yearly dues if their company doesn't provide a named gift fund
- Board members are expected to support the program financially through annual donations to our "development account" or through scholarship donations.
- Board members pay $250 dues. They are the principal source of sponsorships for I-Day. Their firms are usually sponsors and they solicit others.
- No direct donations are mandated. However, we have a Board of Advisors Legacy Fund which was endowed and funded by board members.
- All board members either contribute directly or raise funding for program.
- Donation requirements are noted as expectation of board service upon solicitation to join the board.
- No donation requirements, although most do provide financial support. All board members are engaged in some type of fundraising for the RMI program.
- It is expected that board members participate in some manner such as donations, internships, employment, guest speaker, etc.
- Minimum donations are expected. 3 year renewable agreements. One regulatory member from insurance department does not pay.

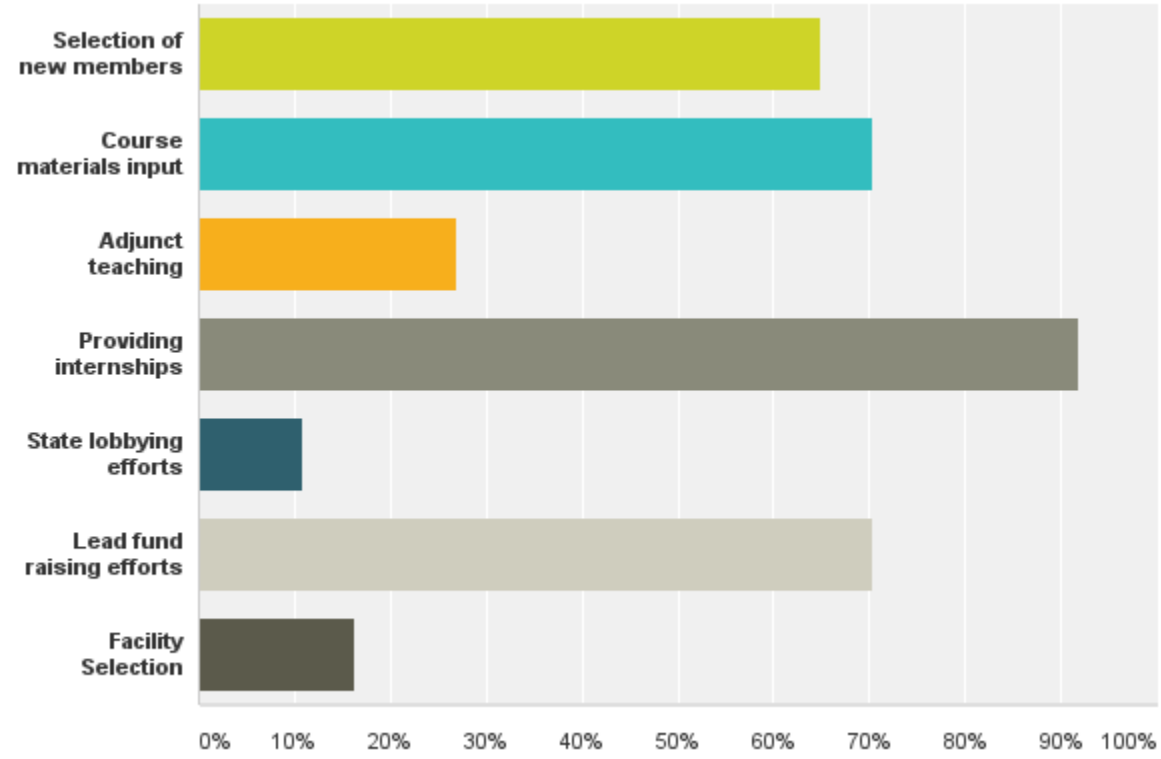
- Not for existing members because we are so new. We do plan on instituting donation requirements in the future. We do expect members to either donate funds or lobby for us in the industry, and/or hire our students.
- Yes from the start the advisory council members are required to provide financial support the initial contribution was $10k we had 8 members after one year in existence the council increased the contribution to $25k for a renewable 3 years total $100k over 4 years. New members are required to the same $25k for renewable 3 years. We are looking at lower levels of contribution but will not be on the advisory board.
- We evaluate a variety of dimensions related to board member contributions: Monetary, Internship/Co-op, academic, Service to the board's mission, etc.

The survey also inquired as to the most frequent areas of influence or assistance contributed by advisory board members. It appears from the results found in Chart 3 below, most RMI programs reach out to advisory board members for internship opportunities. In fact, a few respondents mentioned that a variety of criteria are used when considering new board members, including the ability to provide internships for their students. This also supports the increasing importance prospective employers are placing on hiring students with internship experience. Fundraising efforts and input into the course curriculum were the second and third most frequent areas of involvement.

Chart 3

Measuring Board Effectiveness and Productivity

(Percentage of Boards Engaging in the Following)



We also surveyed respondents as to the effectiveness of their current advisory boards in various areas of productivity. Rating their board on several measures on a 5-point Likert-type scale ranging from 1 (least effective) to 5 (most effective), Table 3 below provides those results. Interactions with students, fundraising, making financial contributions, guest speaker suggestions, and internships were considered the most effective areas. Meeting accreditation requirements was the output receiving the lowest score, which may be due to the AACSB providing a variety of ways to measure a university's interaction with the business community, advisory boards being one of many. However, with accreditation organizations appearing to emphasize advisory boards to a greater degree in the accreditation process, the relatively low score provided to boards for their effectiveness in this area may potentially be problematic for some schools in the future.

Table 3

The following table represents measures of how successful your industry advisory board is in producing specific outputs. Please rate these measures as they apply to your advisory board on a 5-point Likert-type scale ranging from 1 (least effective) to 5 (most effective):

	1	2	3	4	5
Addressing curriculum issues	12%	9%	30%	30%	18%
Contributing to fundraising efforts	14%	6%	17%	26%	37%
Enhancing alumni relations	12%	13%	21%	32%	24%
Enhancing the image of the program through publicity	6%	11%	17%	49%	17%
Giving suggestions for class speakers	6%	9%	24%	38%	24%
Interactions with students via student presentations, mock interviews, etc.	17%	6%	23%	23%	31%
Making financial contributions	6%	15%	21%	26%	32%
Meeting accreditation requirements	38%	35%	16%	3%	6%
Offering internship placement	3%	8%	25%	31%	33%
Performing strategic planning/mission statement	18%	18%	24%	21%	18%
Providing program assessment	15%	18%	36%	18%	12%

To get a general idea of the challenges that some programs with advisory boards may be facing, we asked two insightful questions. The questions and results are found in Table 4 below. At times providing meaningful projects for members to engage in is a challenging aspect of having an advisory board, according to a little over 72 percent of respondents. Finding useful things for board members to do to increase

involvement while not burdening them unnecessarily is a challenge for about 50 percent of the RMI programs.

Table 4

Potential Challenges Facing Advisory Boards

	Yes	No
The board needs something meaningful/concrete to do. Having projects within their range of capabilities is vital to the board's success. Assignments given must have as much importance as their work, as they are substituting their work for ours.	72%	28%
It is difficult to find things that the board can do that make the best use of their experience and expertise. We struggle with this constantly. We want them to feel useful and involved without taking up too much of their time.	48%	52%

Source of questions: Kaupins and Coco (2002)

We were interested in empirically testing advisory board attributes using a measure of RMI program quality as the independent variable. However, objective rankings of RMI programs are sporadic at best. On at least one occasion *Risk Management* magazine has ranked the ten largest programs by size. The well-known ranking of business schools by *U.S. News and World Report* is based solely on the judgments of deans and senior faculty members at peer institutions. The publication also asks those same respondents to nominate the 10 best programs in business specialty areas like accounting, marketing, insurance, and finance. Those programs receiving the most mentions in each area appear on the site ranked in descending order by number of mentions. A school or program had to receive seven or more nominations in a specific specialty area to be listed. This means that schools ranked at the bottom of each specialty ranking have received at least seven nominations.

The rankings of the best undergraduate business programs in a specialty area are based solely on the peer assessment survey conducted in spring 2015. According to Robert Morse, Chief Data Strategist at U.S. News, **schools offering any courses in a specialty are eligible to be ranked in that specialty. Schools did not need to have a listed program or major in a specialty area to be ranked in that specialty area.** Only 13 universities were listed under the "Insurance" category at U.S. News and World Report in 2016, and only six of that group responded to the survey request. Four of those six universities have RMI advisory boards.

Another motivation of this study was to facilitate information-sharing useful to other programs with advisory boards and programs considering the implementation of an advisory board. Selected open-ended questions were included in the survey to encourage guidance and recommendations that would be supportive toward the objective of sharing best practices. To this end, responses to the question, "What has worked best with your Board?" can be found in Appendix D; responses to the question, "What advice or suggestions would you give to avoid problems or a lack of involvement from the Board?" are located in Appendix E; and feedback to the statement, "Describe the Ideal Board Member" can be viewed in Appendix F.

CONCLUSION

To encourage a better response rate and since this study was exploratory in nature, we deliberately utilized a relatively brief questionnaire. Because of this, we admittedly did not delve into issues that would likely be judicious matters for future study. For example, a comparison of the year the RMI programs were created or restarted and the year the advisory board was formed might provide additional information of interest to RMI programs. Our purpose is to advance a conversation about how RMI programs are using advisory boards, provide certain benchmarks about best practices of advisory boards, as well as seeing how other RMI programs are maximizing the productivity and leveraging the utility of their board members. In addition, readers of this study may glean one or more ideas that either make their current or prospective board more effective, or provide insight into what mistakes to avoid. This study also extends prior research regarding advisory boards in specialized areas or departments.

Some results that were a little surprising include the fact that all of the non-AACSB accredited universities responding do indeed have some type of advisory board. Upon further investigation we find that those schools were accredited by different accreditation bodies such as the Accreditation Council for Business Schools and Programs (ACBSP) and the Higher Learning Commission (HLC). Future research might include an investigation into areas affecting or promoting the formation of an advisory by other agencies such as these and the North Central Association of Colleges and Schools (NCA).

Another area not investigated in this study, which may or may not be relevant, is in the matter of *ad hoc* advisory boards, which are empaneled for specific projects and then disbanded when the projects are complete. In addition, the dynamics of the relationship between program directors and their advisory boards could be the subject of an entire study in itself.

The current study is limited to Risk Management and Insurance programs in the United States. Another area of potential future research would be to investigate the prevalence and structure of advisory boards at RMI programs globally. One university responded that they no longer have an active RMI program, but they do have an actuarial science program that does have an advisory board. Investigating board composition and issues applicable to actuarial science programs may be another avenue for future research.

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APPENDIX A

SURVEY RESPONDENTS

1. Appalachian State University
2. Ball State University
3. Bowling Green State University
4. Butler University
5. California State University Northridge
6. California State University Fullerton
7. East Carolina University
8. Eastern Kentucky University
9. Ferris State University
10. Florida State University
11. Georgia State University
12. Illinois State University
13. Indiana State University
14. Middle Tennessee State University
15. Minnesota State University Mankato
16. Mississippi State University
17. Missouri State University
18. New Mexico State University
19. Ohio Northern University
20. Olivet College
21. Pennsylvania State University
22. Saint Joseph's University
23. St. John's University
24. St. Mary's University
25. State University of New York at Oswego
26. Troy University
27. University of Houston Downtown
28. University of Southern Maine
29. University of Akron
30. University of Alabama
31. University of Central Arkansas
32. University of Colorado Denver
33. University of Connecticut
34. University of Hartford
35. University of Iowa
36. University of Louisiana at Lafayette
37. University of Louisiana at Monroe
38. University of Mississippi
39. University of Missouri
40. University of North Texas
41. University of Pennsylvania
42. University of South Carolina
43. University of Texas at Dallas
44. University of Wisconsin Oshkosh
45. Virginia Commonwealth University
46. Washington State University

APPENDIX B

RMI INDUSTRY ADVISORY BOARD SURVEY

1. Name of the university represented by the survey responses _____

2. Does your Risk Management and Insurance (RMI) Program currently have an Advisory Board?

3. If not, are you considering forming a Board in the next three years?

(If answer to #1 was yes, continue with the rest of the survey)

Demographic

4. In what state is your program located? Please note that any survey results reported by location will be limited to no more than 5 regions with multiple responses, to protect anonymity.

5. How many students take RMI classes in an academic year (including summer courses)?

6. Does your program offer an RMI (Check all that apply)
    a. Undergraduate Major
    b. Undergraduate Minor
    c. Masters Degree
    d. Doctoral Degree

7. How many Faculty members are in your RMI program?
    a. Tenured or Tenure Track
    b. Clinical Faculty or Non-Tenure Track
    c. Part-Time Adjunct Faculty

Board Structure

8. What year was your Advisory Board formed?

9. How many Board Members do you have?

10. How frequently does your Advisory Board meet?

11. What percentage of your meetings is held on campus?

12. Are meetings primarily run by a non-faculty Advisory Board member or an RMI faculty member or director?

13. What percentage of your Board consists of
    a. Professionals in the risk management or insurance industries?
    b. Non-profit?
    c. Governmental organization?
    d. Alumni from your University?
    e. RMI faculty?
    f. Student representatives?
    g. Academic Administrators?
    h. Other?

14. How do you determine the agenda for Advisory Board meetings?

15. What percentage of your full-time RMI faculty is directly involved with the Advisory Board?

16. Who nominates and selects your Advisory Board members?

17. Does your board have formal Officers? If so, how are they selected/elected?

18. Does your board have a formal set of By-Laws, Mission Statement, and/or Strategic Plan?

19. Any donation requirements or minimums for board members? Are recruiting relationships required in lieu of financial support requirements?

    Describe briefly here.

Effectiveness of Board Contributions

20. Do either of following statements generally apply to your Advisory Board?

    Yes No The board needs something meaningful and concrete to do. Having projects within their range of capabilities is vital to the board's success. They must be given assignments that have as much importance as their work, as we are asking them to substitute our priorities for theirs.

    Yes No It is difficult to find things that the board can do that make the best use of their experience and expertise. We struggle with this constantly. We want them to feel useful and involved; at the same time, we do not want to take up too much of their time.

21. The following table represents measures of how successful your industry advisory board is in producing specific outputs. Please rate these measures as they apply to your advisory board on a 5-point Likert-type scale ranging from 1 (*least effective*) to 5 (*most effective*):

Addressing curriculum issues	
Contributing to fundraising efforts	
Enhancing alumni relations	
Enhancing the image of the department through publicity	
Giving suggestions for class speakers	
Interaction with students via student presentations, mock interviews, etc.	
Making financial contributions	
Meeting accreditation requirements	
Offering internship placement	
Performing strategic planning / mission statement	
Providing program assessment	

Discussion/Additional Comments

- In this section you are encouraged to provide additional relevant information specific to your own program that have not been addressed in the survey. This could also include "best practices."
  - What has worked best with your Board?
  - What advice or suggestions would you give to avoid problems or a lack of involvement from the Board?
  - Describe the ideal Board member.

APPENDIX C

BYLAWS OF THE INSURANCE & RISK MANAGEMENT ADVISORY COUNCIL

UNIVERSITY OF WISCONSIN OSHKOSH

ARTICLE

I. NAME

This Organization shall be known as the Advisory Council of the University of Wisconsin Oshkosh Center for Insurance and Risk Management, hereinafter referred to as the Advisory Council; University of Wisconsin Oshkosh Center for Insurance and Risk Management hereinafter referred to the Center.

II. RELATIONSHIP

Advisory Council is not a legal entity. Its members have no legal responsibility for the policies and operations of the Center or the University of Wisconsin Oshkosh College Of Business and no legal liability for any activity of the College. The Council has no authority to make commitments on behalf of the college or university. The council's role is to assist the Center in fulfilling its mission and strategic goals.

III. PURPOSES

The Advisory Council will assist in setting and accomplishing the mission, goals, and objectives of the Center. The specific purposes of the Advisory Council are as follows:

A. To assure that the funds contributed by the Advisory Council are used as the Advisory Council intended them to be used.

   i. That funds contributed by the Advisory Council companies will be segregated for the sole use of the Center.

B. Help assess the uses of existing financial resources, determine the need for additional financial support, if any; and identify sources of financial support when necessary;

C. To provide an important link between insurance and risk management education at University of Wisconsin Oshkosh and the industry;

D. To serve as a sounding board to the Center for curriculum, long-range planning, continuing education and professional development, and industry research services;

E. Advise the Executive Director and Director of the Center on areas of opportunity and innovation;

F. To identify and create opportunities for students that encourage and promote interest in insurance & risk management as a profession; Support students in their request for internship and career advice;

G. To bring insurance and risk management executives into close association with students and faculty who are eager to be more professionally involved with the industry; Contribute expertise by collaborating with the Center as liaison, speakers; and adjunct faculty.

IV. MEMBERSHIP

Section 1. Advisory Council

A. The Advisors shall be limited to a total of ten members who are representatives from organizations who are committed to helping the University of Wisconsin Oshkosh create and maintain an outstanding and highly respected insurance program in the United States. The participating organizations should be selected from the insurance and risk management industry. Any changes to the number of members of the council require a majority vote of the Advisory Council.

B. Individuals representing organizations on the Advisory Council will be appointed by their organization and who shall be designated and empowered with their proxy.

C. Applications for prospective candidates for membership on the Advisory Council shall be submitted to the Advisory Council for confirmation after the Advisory Council has agreed upon their nomination.

D. Member organizations should demonstrate and confirm the organization's commitment to the University of Wisconsin Oshkosh by providing: (a) a financial contribution to the Center; (b) opportunities for faculty research and professional growth; (c) opportunities for student professional development such as scholarships and internships; (d) resources to support program enhancements such as web-based expertise and resources; (e) and/or other forms of resources or financial commitment approved by the Advisory Council.

Section 2. Individual Advisors (ex-officio members) to the Center and Advisory Council

A. The individual advisors (ex-officio members) shall be limited to a total of 5 members who are representatives of the insurance industry.

B. The Executive Director of the Center will submit applications for prospective companies and individual candidates for membership

V. FUNCTIONS OF THE ADVISORY COUNCIL

A. The Advisory Council shall develop plans and procedures it deems useful to the exercise of its functions as outlined in Article II.

B. The Advisory Council shall evaluate annually the Center's progress toward achieving the goals outlined in the Strategic Plan for the insurance program.

C. The Advisory Council shall undertake initiatives to advance Insurance & Risk Management education at the University of Wisconsin Oshkosh and the Center

VI. MEETINGS OF THE ADVISORY BOARD

A. The Advisory Council shall hold a minimum of 2 regular meetings during the calendar year.

B. Notice of regular meetings shall be given by e mail to each member at least four weeks prior to the stated date.

C. Minutes of the Advisory Council meetings shall be distributed to members by e mail within six weeks after each meeting.

D. A quorum exists when a simple majority of the Advisory Council is in attendance to transact business.

VII. AMENDMENTS OF THE BYLAWS

A. The By-laws may be altered or amended at any duly held meeting of the Council. Notice of any proposed change must be on the agenda of the meeting at which the change is to be considered.

B. The Bylaws will be reviewed by the Advisory Council every three years or when deemed appropriate by the majority of the Advisory Council.

C. Any proposal to amend the Bylaws shall be adopted and become effective when approved by the majority of those members voting on the proposal, providing those members voting constitute a majority of the Advisory Council.

APPENDIX D

What has worked best with your Board?

- Student engagement (judging panels, mock interviews, etc.). Internship opportunities.
- Board is less than one-year-old so what has worked best is the great PR provided with articles and photos in trade publications to promote RMI program and elevate status.
- They are a source of internships and jobs; they help with career development.
- Have students attend the meetings and have presentations by students on activities, their reason for being in the program. Limit meetings to 3 a year and keep them to no more than 3 hours in length; summer visits to each member's location to update on academic year activities and discussing the strategic plan; company visits rotated to 2 a year (we have 6 current members) with a bus load of students; encourage internships and follow-up after the internship has ended; have an annual social event (Game in a Suite with advisors and students). Get the council and their companies engaged in classroom presentations; special events after the career fairs just for them to interact with students so they stay in touch with them throughout the year, not just at board meetings.
- Listening to them. They need/want to be heard.
- They have been helpful with getting the word out about our program since its inception about a decade ago.
- Continual involvement and reaching out to them to participate in events; asking for feedback.
- Feedback for goal setting.
- Having uses in which board members can assist and facilitating discussions. My goal is to have board members do 75% of the talking at board meetings.
- Assistance in developing a prioritizing the set of initiatives that are the focus for future action.
- Inviting their review, discussion and engagement in addressing the programs' top priorities.
- Contributing and Fundraising, creating internships and job placement.
- Oversight of program and chair.
- Working by developing and furthering objectives of a strategic plan. Having committees with board members directly responsible for the outcomes.
- What works best is to have the group buy into a challenge (e.g., I-Day, Fundraising, etc. If they have a goal that is important they will work.
- Strategic planning.
- Board members have an open invitation to visit our classes if in town. We have a formal program each fall, and Board members are often presenters at that program.
- The board is brand new so we've only met once. It's been great to get their input on curriculum and student development.

- Setting up committees they choose to be a member of with specific goals.
- The Board primarily works on holding a successful golf tournament that raises funds for the RMI program.
- They supported curriculum changes. Now that the curriculum is sound, they don't have as much to do there. Last year we raised funds through soliciting our board and their companies.
- Establish specific goals to achieve by next meeting to keep the group engaged.
- RMI Director seeks input and topics from board members individually well in advance of meetings. Formal agendas sent in advance for comment.
- Tapping members for advice or speaking with classes.

APPENDIX E

What advice or suggestions would you give to avoid problems or a lack of involvement from the Board?

- Select people who don't have to travel in unless they come to your area frequently.
- Create specific tasks or projects and raise accountability; engage in more effective fund-raising efforts though a better understanding of how little RMI programs receive with regards to funding from universities (practically non-existent).
- Board members should be made aware of the program's expectation up front.
- Keep them engaged in the program, show them the benefits and what their financial support and engagement has done – the results. Most of all engagement with the students, that really shows them the benefits and they see they are making a difference.
- You must select the board based on what each person will bring to the table. We have recently "booted" several people off our board because they did not attend meetings, and, they didn't make a positive contribution to our efforts. Selecting a board is definitely a learning process!
- Still struggling with this. Geography is a big problem for us, as most of our current board works about 3 hours from our campus. Also, only a minority are alumni. They have to be given something specific to do.
- Listen and implement.
- Be specific in describing their roles, have specific goals or things you hope to achieve with deadlines, and have the board evaluate their own success/contributions on an ongoing basis.
- Set clear expectations at the beginning; provide an orientation to new members.
- Don't enlist too many people…get bogged down.
- Come up with ways to measure board member engagement (attendance at events, hiring, internships, mentoring, classroom presentations, etc.) and use that to drive results.
- I had a difficult time finding useful activities to actively engage our Board members especially because our campus is set in a rural area and they work in the cities.
- Selection is the key.
- Board discussion must be managed. Visualize ideas/suggestions raised by the Board during meetings. Require Board to engage in prioritization of ideas, guard against leaving the impression that "because this is the idea we came up with and we discussed it, it will be focused on and completed."
- State clear expectations of Board service; provide thorough metrics and narrative illustrations of program for full understanding; appropriately assign/invite members to subcommittee service within their niche; communicate on goals and progress in between meetings.
- Communicate via detailed meeting minutes after each meeting, provide updates in newsletters and maintain email and verbal communications to keep them updated and involved.

- Set of expectations of board members.
- Board needs meaningful projects. Don't just have meetings where you provide an update on what the students have accomplished.
- Don't ever waste their time. If there is no agenda don't have a meeting. However, if you're doing your job not having an agenda is rare. Don't be afraid to ask for anything.
- Development of good relationship.
- It is hard to find things for them to do. No real rewards when research is a priority for AACSB.
- You want active members, not "resume members." Include a participation requirement of Board members so that if they are not active (e.g. missing two meetings in a row), they can be removed.
- Keep them involved in the success of the RMI program. Newsletters, emails, etc.
- Make sure they can give meaningful input that effects the program and their participation makes a difference.
- Meet one-on-one with each Board member at least once per year.
- Have semi-annual meetings with one on campus, in the evening and have an opportunity to meet with students.

APPENDIX F

Describe the Ideal Board Member.

- An Alumni who cares about the program and has time.
- Believes in the Board's mission.
- Willingness to work with the students and faculty, has time and expertise to give to the program.
- Engaged in scholarships, internships, course review and development, classroom presentations; an appreciation for the academic environment and support for the program with the higher ups on campus and at the state legislature, including the governor being a diehard advocate. In addition, a strong leader to question the actions of the Center to hold them accountable to the strategic plan and be a constant voice to the industry, the university and government…oh, and have fun – be engaged with the students.
- Someone who can either bring us expertise, jobs, publicity, or money (or all four!). The ideal board member must be someone who does not want to micromanage the university. Board members must understand that they are advisory, and while their input is appreciated, at the end of the day the university calls the shots. That's a hard thing to communicate to someone.
- The ideal board member works at a company that is a generous donor to the RMI program, and also provides internship and career opportunities. They provide feedback on what is important to the industry, industry trends, and strengths/weaknesses of recent college graduates hired. They are willing to do what they are being asked to do, and think about how to improve the program beyond the Board meetings.
- It's an album, not a single. Not one type is ideal, it's an amalgamation of geography, alumni mix, industry, title, involvement, etc. It takes all types. A room full of the same type of stuffed suits is worthless.
- Willing to provide feedback, experience in the insurance industry but not at such a high level that they can't be involved on a regular basis; enjoys giving back.
- Committed.
- Has interest in big picture and willing to share ideas and challenge status quo, while helping to make sure program has resources needed to succeed.
- One who offers internships and employment for our students and likes to be actively involved with offering tips and advice for our students.
- Energetic, enthusiastic, successful.
- Someone who has significant responsibility for results in their organization, has significant experience in hiring people, has a clear idea about required competencies, and has successfully run major projects.
- Attends two or more meetings a year OR engages in communication with Dean regularly; delivers timely corporate support annually for program initiatives; delivers non-monetary industry resources for one or more program initiatives (career development/placement; niche disciplinary centers/studies; etc.).

- Engaged industry professional who actively seeks students for internships and career positions with their companies and remains engaged with program and involved in its activities.
- Industry and student involvement as well as fundraising.
- Successful, a great role model, interested in putting students first, yet supportive of faculty efforts and conflicting priorities between research and teaching.
- Work, Wisdom, Wallop (i.e., influence). Any two. At the level we are looking for they have the social skills, which are essential but not sufficient.
- Advertises the program, contributed financially, hires the graduates of the program.
- Commitments.
- He/she: mentors students, offers internships/job shadows, provides guidance to the Board, participates in the semi-annual meetings, guest lectures in class, contributes financially, and appreciates that academia is different from the private sector.
- 12 members that work (not just at meetings) to promote the RMI program and to provide feedback. Support including financial and internships is also important – not just from the board but from contacts the board makes with other professionals (selling the program).
- C-Suite, local office, regularly attends Board meetings; strong student involvement of their company by offering internships and shadow days, mentorship, hires our grads, participates in student events, company provides a named gift fund.
- One who is actively trying to find ways to help raise funds for the program; who is interested in providing input and helping to make the program more successful for the students.
- Active but not too pushy, supportive.
- Passionate about the industry and about the Program.
- Someone with a long career, high placement in their organization, committed to internships/placement.

Illustrating Attitudes Toward Risk

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ABSTRACT

This classroom exercise is designed to illustrate the concept of risk aversion through a series of four short questionnaires. Students indicate their preferences in a variety of situations constructed to uncover a particular aspect of their tolerance for risk. By comparing students' choices across varying payoffs, probabilities, bet structures and initial endowments, the exercises contribute to an understanding of the complexity of personal preferences and attitudes toward risk and the impact on financial decision-making.

INTRODUCTION

This class exercise is designed to help students gain a finer understanding of the concept of risk aversion and an appreciation for the subtleties and inconsistencies in personal preferences and attitudes toward risk. The exercise also can be used to lay the foundations for utility analysis and for building a risk management decision-making framework consistent with the corporate objective of maximizing firm value.

There is an abundance of literature on risk aversion but relatively little of it is focused on the teaching of the topic or on illustrating one's own preferences toward risk. Many risk management textbooks provide some introduction to the concept of risk aversion using a utility theory model.[13] Cather (2010) provides an excellent pedagogical discussion on risk aversion and utility theory in an insurance context. He employs a simple model of insurance demand in a "student-friendly" manner to demonstrate how risk aversion affects decisions made under conditions of uncertainty. The article provides real-life examples and practice problems to assist students in their mastery of the subject.

Hobbs and Sharma (2011) examine risk aversion in the context of a risk averse investor. They note that instructors often simplify the concept to conclude that investors prefer assets with higher mean returns or lower standard deviations or both, all else equal. Using survey data of investors choosing between two assets, they show that skewness and kurtosis are recognized and incorporated into an investor's preferences. Thus they suggest that instructors can go beyond a simple mean-standard deviation framework in discussing a risk averse investor's behavior.

Nalley and McKenzie (2011) approach teaching the concept of risk aversion through an experiment designed around expected exam grades. Students are given choices regarding taking exams and earning a risky unknown grade versus not taking exams and being assigned a "sure" grade. They find that the more risk averse a student is, the less likely they will actually be to take the exam, preferring instead a lower but certain grade. They believe the experiment to be an effective way of teaching the concept of risk aversion but, as with Hobbs and Sharma (2011), the experiment does not take place in an insurance setting. Pope and Ma (2004) utilize a grade insurance project that provides some protection against loss of points on exams and quizzes. Students design grade insurance products complete with pricing, underwriting, contract development, and marketing strategies that are offered to other students

[13] See, for example, Harrington and Niehaus (2004) or Doherty (2000).

in insurance classes. They benefit from acting as insurer and as consumer in understanding the complexity of the insurance transaction.

Like Cather (2010), this article examines risk aversion in an insurance context but seeks to do so in an experiential way like Hobbs and Sharma (2011), Nalley and McKenzie (2011), and Pope and Ma (2004) so that students have a true "feel" for their own level of risk aversion.

DESCRIPTION OF THE EXERCISE

In a series of four short exercises contained in the Appendix, the student is asked to indicate his/her preferences in a variety of situations. I tell them not to analyze the situations too much but rather to go more with their gut reactions. The exercises are done one at a time with discussion after each is completed before moving on to the next. Each of these exercises is constructed to illustrate specific aspects of the concept of risk aversion.

Exercise 1 presents three different scenarios that offer potential gains. In each scenario, the student chooses which of three situations is most preferred. Each situation within a scenario is structured to have the same expected value although probabilities and payoffs vary. The magnitudes of the payoffs increase substantially from Scenario 1 to Scenario 2 to Scenario 3. I ask for a simple show of hands as to who has selected A or B or C in Scenario 1 and then in Scenarios 2 and 3. First, I point out that the simple fact that each of them has a preference in each scenario means that risk matters to them, otherwise they would be equally happy in Situations A, B and C given that they all have the same expected value. Students also immediately see that individual preferences differ since all students never unanimously prefer a single situation in any scenario. I ask how many students change their choice of "letter" (A, B, or C) from one scenario to the next. Virtually all change sometime between Scenario 1 and Scenario 3. We discuss how preferences and attitudes toward uncertainty differ not only across individuals, but also for a given individual depending on the size and probabilities of the payoffs. All "A" situations provide a certain payoff, all "B" situations provide some moderate payoff, all "C" situations provide an all-or-nothing payoff yet few, if any, students consistently choose one particular letter over the others across all three scenarios. A student's willingness to tolerate uncertainty often changes as the size of the stakes changes. Many students choose C in Scenario 1 but hardly any will do so in Scenario 3.

Exercise 2 asks students whether they will enter into specific gambles so that they now are faced with the possibility of loss as well as gain. The structures of the bets in situations 1 through 5 are identical between Scenario 1 and Scenario 2 except that all amounts differ by a factor of 100. Again a show of hands illustrates different preferences and attitudes toward risk across students. Furthermore, students see that they are often more likely to enter into a gamble if odds are stacked progressively in their favor (situation 1 to 2 to 3) or if payoffs are stacked progressively in their favor (situation 4 to 5). Comparing their answers for Scenario 1 to Scenario 2 also illustrates how the size of the stakes affects their preferences.

Exercise 3 is very similar to Exercise 1 with two exceptions: first, it deals only with the possibility of loss and, second, Scenario 3 reduces the probability of substantial loss below 50%. The expected values of each situation within a scenario are still the same. This exercise is designed to make several points: (1) a show of hands illustrates differences across students, (2) comparing Scenario 1 to Scenario 2 shows how (or if) an individual's preference changes with the size of the loss, (3) comparing Scenario 2 to Scenario 3 shows how (or if) an individual's preference changes when odds and payoffs are stacked, and (4) comparing Exercises 1 and 3 in general can illustrate differences in preferences when faced with gains as opposed to losses.

In Exercise 4, students indicate how much they would be willing to pay for auto insurance in varied circumstances. Endowments change (Scenario 1 vs. 2), information changes (situation 1 has no loss information), and probabilities and loss amounts change (situations 2, 3, and 4). This final exercise is meant to illustrate the concepts discovered in Exercises 1 through 3 in a specific risk management context. The class sees that individual students are willing to pay a wide variety of prices, that those prices may change as information about the frequency and severity of loss increases and/or changes, and that what one is willing to pay may depend on one's income and net worth. Scenario 2 is particularly fun as it seems that at least one person is always unwilling to buy insurance at all because he/she can "afford" to face the potential loss, while someone else is always willing to pay the maximum for insurance because he/she can easily "afford" the premium.

APPROPRIATE COURSES AND TEACHING POINTS

I have used this approach in my undergraduate Fundamentals of Risk and Insurance class and my undergraduate and graduate Enterprise Risk Management classes though it could be adapted to any course involving financial decision–making under uncertainty. I do not change the exercise itself from one course to the next; I simply change the discussion and points of emphasis regarding the exercise depending on the level and focus of the class. For instance, in the undergraduate Fundamentals course, the sole purpose is to understand the basic concept of risk aversion and why people are willing to pay more than the expected loss for insurance. In the ERM courses, the exercise illustrates the concept of risk aversion and then uses it as a springboard for a full blown graphical and statistical utility analysis of the insurance decision. We move on from there to a discussion of whether a firm will behave as a risk-neutral or risk averse entity and begin to understand the framework for corporate risk management decisions.

The benefits and teaching points of this approach are:

- Personalizes the concepts important in risk aversion by illustrating them in action with a student's own decisions.
- Polling of students with regard to their decisions encourages informal interaction among the students and with the professor. We always seem to wind up laughing and joking about someone who is incredibly risk averse, incredibly not risk averse, or incredibly inconsistent across different scenarios.
- Allows for good discussion of subjective risk. For a given loss distribution, some students will describe a certain probability of loss as high while others will describe that same probability as low.
- Allows for good discussion of the law of diminishing marginal utility, arising from individuals indicating they have changed decisions when faced with gains versus losses (Exercise 1 vs. 3) and also from stacking odds and payoffs in the bets in Exercise 2. An individual may tolerate more uncertainty (take more risk) when facing the possibility of gain than when facing the possibility of loss. Dollars that are lost are more highly valued than dollars that are gained.
- Illustrates that individuals' preferences and attitudes toward risk are personal and differ from one person to the next.
- Illustrates that a given individual's preference and attitude toward risk may be inconsistent across different scenarios and endowment levels. Risk aversion is not necessarily well behaved, smooth or absolute.
- Shows how an individual's behavior may change when odds or payoffs are stacked in their favor.
- Shows that the size of the stakes may affect attitudes toward risk.
- Shows that the size of an individual's initial endowment may affect attitudes toward risk.
- Serves as an excellent basis for the presentation of utility analysis and discussion of behavior under alternative assumptions of risk preference. For instance, a risk neutral individual would be indifferent to situations A, B and C in each scenario of Exercises 1 and 3 given that the expected values are equal,

and an individual who chooses not to buy insurance at any price when the initial endowment is high (Exercise 4, Scenario 2) has become a risk taker across the dollar ranges considered here.

- Allows for good discussion of potential agency problems in corporate decision-making. Managers, who may be risk averse themselves, theoretically should behave in a risk neutral fashion to maximize firm value on behalf of their well-diversified stockholders. However, their own risk averse nature may still affect their perceptions of situations and therefore their decisions.

CONCLUSION

The features that I believe make this exercise effective are its interactive nature and its ability to personalize the concepts of risk aversion and preference. While the standard explanations of risk aversion, the law of diminishing marginal utility, and utility analysis adequately convey the information from an intellectual standpoint, this risk aversion exercise lets a student feel his or her own attitudes toward risk. Before introducing the technical concepts and definitions, the student has already made decisions that implicitly are affected by the degree of uncertainty, the direction and size of the payoffs, and the magnitude of the initial endowment. He or she also sees that other students make different decisions under identical situations. As the main points of each exercise are brought to light and the technical concepts are presented, students have more than just a theoretical understanding because they can directly relate the theoretical concepts to their own specific preferences and changes in decisions from one scenario to the next.

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APPENDIX

EXERCISE 1

Scenario 1: Which situation do you prefer?

A: receive $100 for sure

B: 50% chance of receiving $50
50% chance of receiving $150

C: 50% chance of receiving $0
50% chance of receiving $200

Scenario 2: Which situation do you prefer?

A: receive $4,000 for sure

B: 50% chance of receiving $2,000
50% chance of receiving $6,000

C: 50% chance of receiving $0
50% chance of receiving $8,000

Scenario 3: Which situation do you prefer?

A: receive $200,000 for sure

B: 50% chance of receiving $100,000
50% chance of receiving $300,000

C: 50% chance of receiving $0
50% chance of receiving $400,000

EXERCISE 2

Scenario 1: Assume you have $100. Will you enter into the following gambles?

Yes No	Situation 1:	50% chance of winning another $100 50% chance of losing your $100
Yes No	Situation 2:	70% chance of winning another $100 30% chance of losing your $100
Yes No	Situation 3:	90% chance of winning another $100 10% chance of losing your $100
Yes No	Situation 4:	50% chance of winning another $100 50% chance of losing $60
Yes No	Situation 5:	50% chance of winning another $100 50% chance of losing $20

Scenario 2: Now assume you have $10,000. Will you enter into the following gambles?

Yes No	Situation 1:	50% chance of winning another $10,000 50% chance of losing your $10,000
Yes No	Situation 2:	70% chance of winning another $10,000 30% chance of losing your $10,000
Yes No	Situation 3:	90% chance of winning another $10,000 10% chance of losing your $10,000
Yes No	Situation 4:	50% chance you win another $10,000 50% chance you lose $6000
Yes No	Situation 5:	50% chance you win another $10,000 50% chance you lose $2000

EXERCISE 3

Scenario 1: Which situation do you prefer?

A: lose $100 for sure

B: 50% chance of losing $50
50% chance of losing $150

C: 50% chance of losing $0
50% chance of losing $200

Scenario 2: Which situation do you prefer?

A: lose $500 for sure

B: 50% chance of losing $300
50% chance of losing $700

C: 50% chance of losing $0
50% chance of losing $1,000

Scenario 3: Which situation do you prefer?

A: lose $500 for sure

B: 70% chance of losing $400
30% chance of losing $733

C: 90% chance of losing $0
10% chance of losing $5,000

EXERCISE 4

Scenario 1:
Assume you have an income of $50,000 per year and have net worth of $30,000. You drive a 2016 Toyota Camry and live within ‹your city here› city limits.

1. What is the maximum amount you would be willing to pay for auto insurance?

   $0 $500 $1,000 $1,500 $3,000 $4,500

2. What is the maximum amount you would be willing to pay for auto insurance given the following additional information?

   89% chance of having $0 in losses
   10% chance of having $2000 in losses
   1% chance of having $50,000 in losses

   $0 $500 $1,000 $1,500 $3,000 $4,500

3. What is the maximum amount you would be willing to pay for auto insurance given the following additional information?

   89% chance of having $0 in losses
   10% chance of having $2,000 in losses
   1% chance of having $300,000 in losses

   $0 $500 $1,000 $1,500 $3,000 $4,500

4. What is the maximum amount you would be willing to pay for auto insurance given the following additional information?

   10% chance of having $0 in losses
   89% chance of having $1,000 in losses
   1% chance of having $10,000 in losses

   $0 $500 $1,000 $1,500 $3,000 $4,500

Scenario 2:
Now assume you have an income of $500,000 per year and have net worth of $300,000. You still drive a 2016 Toyota Camry and live within ‹your city here› city limits.

1. What is the maximum amount you would be willing to pay for auto insurance?

   $0 $500 $1,000 $1,500 $3,000 $4,500

2. What is the maximum amount you would be willing to pay for auto insurance given the following additional information?

   89% chance of having $0 in losses
   10% chance of having $2,000 in losses
   1% chance of having $50,000 in losses

   $0 $500 $1,000 $1,500 $3,000 $4,500

3. What is the maximum amount you would be willing to pay for auto insurance given the following additional information?

   89% chance of having $0 in losses
   10% chance of having $2,000 in losses
   1% chance of having $300,000 in losses

   $0 $500 $1,000 $1,500 $3,000 $4,500

4. What is the maximum amount you would be willing to pay for auto insurance given the following additional information?

   10% chance of having $0 in losses
   89% chance of having $1,000 in losses
   1% chance of having $10,000 in losses

   $0 $500 $1,000 $1,500 $3,000 $4,500

A Citation Analysis of Risk and Insurance Journals: 2011-2015

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ABSTRACT

The bibliographies of nine risk and insurance journals were reviewed and citations were recorded to determine the relative influence of these risk and insurance journals on research in these same journals during the years 2011 through 2015. Tables are constructed that present the frequency with which each of these journals cites itself and the other sample journals. The journals are ranked by total number of citations and non-self-citations. Impact factors are calculated using all citations as well as non-self-citations to determine the journals' per article impact on research in these same journals. Finally, comparisons are made between the current results and the results of a previous risk and insurance citation study to show the changes in sample journals' impact over the last decade.

INTRODUCTION

Every academic discipline must have methods to determine the relative quality and impact of the journals within that discipline. As described in Colquitt et al. (2009), measures of journal quality are important to a number of parties. Authors use them to determine where to send their work for potential publication. Colleges and universities use them in making tenure and promotion decisions, as well as within the annual merit review process. The people making decisions about tenure, promotion, and merit are frequently of diverse disciplines, so they often desire objective, external resources to assist them in evaluating journals outside their own areas of expertise. Journal editors can also benefit from understanding the relative influence of their own journal within the discipline. Finally, libraries are increasingly resource-constrained and have to make difficult decisions about which journals to purchase, and objective analysis of quality can be helpful in such decisions.

A widely accepted measure of journal quality is a journal's impact factor, which is based on citations.[14] The most widely used impact factors are those produced by Thomson Reuters in their Journal Citation Reports (JCR). Business disciplines are included in their Social Sciences JCR. The discipline of risk management and insurance faces a significant challenge in this regard, in that a number of journals that are highly respected within the field, and which often publish articles by highly accomplished scholars in the field, are not included in the Social Sciences JCR. Such journals include *Risk Management and Insurance Review*, *Journal of Insurance Regulation*, and *Journal of Insurance Issues*. Therefore, the discipline needs additional resources for evaluating journal quality. One such resource has been a series of citation studies that have been conducted over the years focusing specifically on risk management and insurance journals. These studies include Colquitt (1997), Colquitt (2003), and

[14] Another source commonly used by universities to measure the quality of a journal is Cabells Scholarly Analytics. Information provided by Cabells that is regularly used is the acceptance rate of a journal, which is an indication of a journal's academic rigor and exclusivity. All of the journals included in this study are also listed in Cabells.

Colquitt et al. (2009). The most recent of these studies focused on citations in the period 2001- 2005, meaning that the latest comprehensive citation study of risk and insurance journals is based on data that are over a decade old. Therefore, an updated citation study is warranted, to assure that all interested parties have access to timely, accurate information about journal quality in the discipline of risk management and insurance.

METHODOLOGY AND DATA

Similar to Colquitt et al. (2009), we examine the citations to risk and insurance articles published in these same journals during the sample period, 2011-2015. However, the sample journals evaluated in the two studies are different. Colquitt et al. (2009) examined 17 risk, insurance, and actuarial journals, and we are focusing on a subset of the nine risk and insurance journals most relevant to risk management and insurance researchers, while excluding the actuarial journals. The set of journals evaluated are *Benefits Quarterly* (*BQ*), the *Geneva Papers on Risk and Insurance Issues and Practice* (*GPIP*), the *Geneva Risk and Insurance Review* (*GRIR*), the *Journal of Financial Service Professionals* (*JFSP*), the *Journal of Insurance Issues* (*JII*), the *Journal of Insurance Regulation* (*JIR*), the *Journal of Risk and Insurance* (*JRI*), the *Journal of Risk and Uncertainty* (*JRU*), and *Risk Management and Insurance Review* (*RMIR*). Actuarial journals are certainly important, and an updated citation study of such journals is warranted, but it is not critical that it be combined with a study of risk management and insurance (RMI) journals. In addition, Colquitt et al. (2009) also reviewed 16 finance journals for citations to the 17 journals being evaluated, which we do not do in this study. Including citations from actuarial and finance journals in the 2009 study required a tremendous amount of time, but had very little impact on the results. While approximately 18% and 9% of citations to the *JRI* were from actuarial and finance journals, respectively, these journals were responsible for only approximately 5% of citations to the eight other journals in our current sample. As a result, the omission of finance and actuarial journal citation counts are not expected to materially affect the results of the study. Colquitt et al. (2009) note that "the impact [of including finance journals] is not very significant" (p. 935). As will be seen, the *JRI* is unmistakably the premier risk and insurance journal, and the exclusion of the actuarial and finance journals does not change that conclusion.

Two changes also appear within the RMI journal list of this study compared to Colquitt et al. (2009). First, the previous study included *Geneva Papers on Risk and Insurance Theory* (*GPT*). The name of that journal is now *Geneva Risk and Insurance Review*, and therefore appears in the current study under that name. Any citations to *GPT* are credited in this study to *GRIR*. Second, *CPCU Journal* is not included in the current study, because it has ceased publication.

Data collection in this study is very similar to that of Colquitt et al. (2009). We looked at the references listed in each article of the sample journals during the period of 2011-2015 and recorded citation information from citations to articles in the nine sample risk and insurance journals. Citations were only taken from feature articles, shorter articles, invited articles, and research-related notes and communications. Articles that were listed as forthcoming were also included, but working papers subsequently published in the sample journals were not.

The citations collected are used to measure the significance and impact of the sample journals over the period of 2011-2015. First, citation patterns are presented to demonstrate the level of impact the research in each sample journal has had on the research of the other sample journals. Then, aggregate citation counts and impact factors (citations per article published) are calculated to determine the overall influence of a journal's articles on subsequent risk and insurance research. Given the similarities between this study and Colquitt et al. (2009), comparisons can be made between the results of the two studies, showing the increase or decrease in a journal's influence over the last decade.

RESULTS

Table 1 contains all of the collected citation data for the study period of 2011-2015. Table 2 provides the same information on a normalized basis (per 100 citations from each journal to the sample journals). Each of the nine sample journals is listed along the left hand side of the table and across the top of the table. The left hand column represents the journals from which the citations come, and the row across the top represents the journals which are being cited. In Table 1, for example, *JRI* cited *BQ* zero times, *GPIP* 58 times, *GRIR* 30 times, and so on. The "Total" row at the bottom shows the total number of citations to each sample journal received from all the sample journals. The numbers in Table 2 can be read as percentages, so for example, it is seen that 0 percent of JRI's citations to the sample journals were to *BQ*, 4.5 percent were to *GPIP*, 2.3 percent were to *GRIR*, and so on.

Two numbers in each row of Tables 1 and 2 are bolded, representing the two journals most frequently cited by each journal. Two things stand out when looking at the bolded numbers. First, for eight of the nine journals, self-citations are bolded. For four journals, the journal cites itself more frequently than it cites any other sample journal (*BQ*, *JFSP*, *JRI* and *JRU*), and for four others, the journal cites just one other sample journal more frequently than itself (*GPIP*, *GRIR*, *JIR* and *RMIR*). *JII* is the sole exception, citing *GPIP*, *JIR*, *JRI*, *JRU*, and *RMIR* more frequently than it cites itself. The second thing that stands out is the dominance of *JRI*. *JRI* appears as the most frequently cited journal for six of the nine sample journals, and it is the second most frequently cited journal for the remaining three sample journals. In total, *JRI* is cited in excess of three times more frequently than the next most cited journal, *JRU*. In fact, it is cited more frequently than all the other sample journals combined. *JRI* is also the only journal cited at least once by each of the sample journals.

Table 3 shows the sample journals ranked based on the total number of citations received. Self-citations are then subtracted, and an adjusted ranking is provided that is based on the total number of non-self-citations received. The most striking result of Table 3 is how little self-citations influence the rankings. The top six journals are ranked in exactly the same order whether self-citations are included or excluded. The only change is that *JFSP* drops from seventh to ninth when self-citations are excluded, moving *JII* and *BQ* each up one slot.

Table 1

Citation Patterns among Risk and Insurance Journals

2011-2015

	Citations to the Sample Risk and Insurance Journals								
Citations from	*BQ*	*GPIP*	*GRIR*	*JFSP*	*JII*	*JIR*	*JRI*	*JRU*	*RMIR*
BQ	**12**	1	0	2	0	0	**3**	0	0
GPIP	0	**218**	50	0	13	40	**568**	55	65
GRIR	0	19	**35**	0	4	4	**117**	28	4
JFSP	5	0	0	**98**	0	5	**11**	1	1
JII	0	16	2	0	14	20	**189**	**21**	16
JIR	0	32	2	0	4	**73**	**127**	17	18
JRI	0	**58**	30	2	17	32	**1057**	57	45
JRU	0	5	17	0	0	3	**53**	**560**	4
RMIR	0	45	14	0	11	24	**256**	14	**86**
Total	17	394	150	102	63	201	2381	753	239

Notes: *BQ = Benefits Quarterly*; *GPIP = Geneva Papers on Risk and Insurance Issues and Practice*; *GRIR = Geneva Risk and Insurance Review (formerly Geneva Papers on Risk and Insurance Theory)*; *JFSP = Journal of Financial Service Professionals*; *JII = Journal of Insurance Issues*; *JIR = Journal of Insurance Regulation*; *JRI = Journal of Risk and Insurance*; *JRU = Journal of Risk and Uncertainty*; *RMIR = Risk Management and Insurance Review*; Citations to the *Geneva Papers* prior to 1990 (the year that the *Geneva Papers* were split into two journals, the *GPIP* and the *GPT*) are attributed to the *GPIP* and the *GRIR* in the proportion that the *GPIP* and the *GRIR* received their own citations from that journal during 1990 and beyond. The bold print numbers represent the two journals that are most frequently cited by the citing journal.

Table 2

Normalized Citation Patterns among Risk and Insurance Journals

2011-2015

Citations to the Sample Risk and Insurance Journals

Citations from	*BQ*	*GPIP*	*GRIR*	*JFSP*	*JII*	*JIR*	*JRI*	*JRU*	*RMIR*	*Overall Total*
BQ	**66.6**	5.6	0	11.1	0	0	**16.7**	0	0	100
GPIP	0	**21.6**	5.0	0	1.3	4.0	**56.3**	5.4	6.4	100
GRIR	0	9.0	**16.6**	0	1.9	1.9	**55.4**	13.3	1.9	100
JFSP	4.1	0	0	**81.0**	0	4.1	**9.2**	0.8	0.8	100
JII	0	5.8	0.7	0	5.0	7.2	**67.9**	**7.6**	5.8	100
JIR	0	11.7	0.7	0	1.	**26.8**	**46.6**	6.2	6.6	100
JRI	0	**4.5**	2.3	0.2	1.3	2.5	**81.3**	4.4	3.5	100
JRU	0	0.8	2.6	0	0	0.5	**8.3**	**87.2**	0.6	100
RMIR	0	10.0	3.1	0	2.4	5.3	**57.0**	3.1	**19.1**	100

Notes: *BQ = Benefits Quarterly*; *GPIP = Geneva Papers on Risk and Insurance Issues and Practice*; *GRIR = Geneva Risk and Insurance Review (formerly Geneva Papers on Risk and Insurance Theory)*; *JFSP = Journal of Financial Service Professionals; JII = Journal of Insurance Issues*; *JIR = Journal of Insurance Regulation*; *JRI = Journal of Risk and Insurance*; *JRU = Journal of Risk and Uncertainty*; *RMIR = Risk Management and Insurance Review*; Citations to the *Geneva Papers* prior to 1990 (the year that the *Geneva Papers* were split into two journals, *GPIP* and *GPT*) are attributed to *GPIP* and *GRIR* in the proportion that *GPIP* and *GRIR* received their own citations from that journal during 1990 and beyond. The bold print numbers represent the two journals that are most frequently cited by the citing journal.

Table 3

Journals Ranked by Total Number of Citations by the Sample Journals

During the Years 2011 through 2015

Rank	Journal	Total Citations	Self-Citations	Non-Self-Citations	Adjusted Rank
1	*Journal of Risk and Insurance*	2381	1057	1324	1
2	*Journal of Risk and Uncertainty*	753	560	193	2
3	*Geneva Papers on Risk and Insurance Issues and Practice*	394	218	176	3
4	*Risk Management and Insurance Review*	239	86	153	4
5	*Journal of Insurance Regulation*	201	73	128	5
6	*Geneva Risk and Insurance Review*	150	35	115	6
7	*Journal of Financial Service Professionals*	102	98	4	9
8	*Journal of Insurance Issues*	63	14	49	7
9	*Benefits Quarterly*	17	12	5	8

The total citation count is a reasonably good measure of the overall impact of a journal's research during the sample period, but it does not fairly capture the journal's impact on a per article basis. For example, if two journals received the same number of total citations to articles published during a sample period, we could fairly say that the impact of those two journals was comparable. However, if one journal published ten articles during that period and the other published twenty, then the per article impact of the first would be double that of the second. The Insurance Impact Factors (IIF) calculated and presented in Table 4 look at citations to a journal during a certain period, controlling for the number of articles published during that period. More specifically, to calculate the IIF, we record the number of citations in the period 2011-2015 to a particular journal's articles that were published during the period 2006-2015. We then divide that by the number of articles published in that journal during 2006-2015. To reiterate, the citations come from years 2011-2015, but unlike with the total citation counts in Table 1, we only count citations to articles that were published in the decade 2006-2015, and divide by the number of articles published in the journal during that decade. The Adjusted Insurance Impact Factors (AIIF) are calculated in a similar fashion, but only consider non self-citations. The IIF and the AIIF were calculated the same way in Colquitt (1997, 2003) and Colquitt et al. (2009).

Not surprisingly, *JRI* has the highest IIF of any of the sample journals.[15] In fact, its IIF is over twice as high as that of *JRU*, the journal with the next highest IIF. In addition, when compared to 2005 data, *JRI*'s IIF increased by over 75%. So, while *JRI* articles, on average, remain the most impactful, their impact has increased considerably over the last decade. Interestingly, when compared to the 2005 IIFs, seven of the nine sample journals' IIFs have increased.

Two additional noteworthy changes in the IIFs from 2005 to the current study are with *RMIR* (increase of over 250%) and *GPIP* (increase of over 200%).[16] One of the most important findings of this study is the significant jump in the impact of *RMIR*. *RMIR* jumps from 7th in the ranking of IIFs in 2005 to 3rd in the current study. This result was not entirely unanticipated, as *RMIR* began publication in 1998 and anecdotal evidence suggests that it has become increasingly influential over the last decade or so. However, this study is the first to quantify the magnitude of the growth in its influence.

JRI also leads all sample journals in adjusted impact factors with an AIIF of 1.205. This is an increase of 43% since 2005. Again, six of the nine sample journals enjoyed an increase in their AIIFs since 2005. Interestingly, *JRU*'s AIIF fell by over 30%.[17] In the previous studies, *JRU* has seemed to have had more influence outside of the risk and insurance sample journals than within. Colquitt et al. (2009) note that the journals most frequently citing *JRU* are in the fields of economics, psychology, and law. Once again, *RMIR* jumps from 6th in 2005 to 3rd in the current study in terms of AIIF. This is consistent with

[15] Using the most recent data, the Thomson Reuters' JCR impact factor for the *JRI* is the highest of the JCR impact factors for the four journals that are in both our sample and the Social Sciences Citation Index sample. In fact, the impact factors of all four of the journals (*JRI, JRU, GRIR,* and *GPIP*) are in the same rank order in both the JCR and our study.

[16] Six of the nine sample journals experienced an increase in the IIF between the previous study and this one. It appears that journal articles in recent years are on average citing more literature than in the past. For example, total sources cited by *JRI* articles in the period 2011-2015 were about 66% higher compared to 2001-2005. Some of this is attributable to an increase in the number of *JRI* articles published, and some is due to the fact that for 2005-2010, the average *JRI* article cited 29.7 sources, while for 2011-2015, the average *JRI* article cited 39.3 sources.

[17] Some readers may be surprised by the low ranking of the *JRU* in terms of the AIIF, given that *JRU* is consistently ranked well using JCR impact factors. As explained in Colquitt et al. (2009), *JRU* is very unique in our sample in that it has seemed to have had more influence outside of the risk and insurance sample journals than within. That study notes that the journals most frequently citing *JRU* are in the fields of economics, psychology, and law.

the IIF result reported above. In fact, *RMIR*'s AIIF increased by almost 400%. Other journals also moved among the AIIF rankings between 2005 and the current study, but none of them changed more than two places.

Table 5 provides a summary of the journal rankings for 2011-2015 and 2001-2005 based on total citations, total non-self-citations, insurance impact factors, and adjusted insurance impact factors. As discussed throughout, *JRI* ranks first based on each of the criteria. *RMIR* sees the greatest improvement in impact, rising at least three spots in the rankings under each of the four criteria. *GPIP*'s impact has also increased over the last decade, as evidenced by an improvement in all four criteria, with an increase of two spots in two of the four criteria. *JFSP* and *BQ* rank near the bottom for all criteria, but it should be emphasized that these two journals are different in nature than the other sample journals. *JFSP* and *BQ* are practitioner journals rather than academic journals, and therefore the impact of their articles is more likely felt on business practice than on other risk management and insurance literature. This type of impact is more difficult to measure than citations, and the value of such impact in an academic setting depends on a school's mission. For a school with a heavy focus on academic research, these journals are not likely to be highly valued. However, for schools whose missions emphasize impact on business practice, these journals might carry considerable weight despite their relatively low citation numbers.

Table 4

Insurance Impact Factors

2011-2015 versus 2001-2005

	All Citations				No Self-Citations			
Journal	Insurance Impact Factor 2015	Impact Factor Rank 2015	Insurance Impact Factor 2005*	Impact Factor Rank 2005	Adjusted Impact Factor 2015	Adjusted Impact Factor Rank 2015	Adjusted Impact Factor 2005*	Adjusted Impact Factor Rank 2005
Journal of Risk and Insurance	2.509	1	1.430	1	1.205	1	0.842	1
Journal of Risk and Uncertainty	1.130	2	1.038	2	0.150	7	0.225	5
Risk Management and Insurance Review	1.027	3	0.290	7	0.651	3	0.133	6
Geneva Risk and Insurance Review	0.943	4	0.444	4	0.724	2	0.276	3
Geneva Papers on Risk and Insurance Issues and Practice	0.937	5	0.311	6	0.311	5	0.076	7
Journal of Insurance Regulation	0.717	6	0.699	3	0.457	4	0.281	2
Journal of Insurance Issues	0.372	7	0.438	5	0.282	6	0.259	4
Journal of Financial Service Professionals	0.084	8	0.171	8	0.004	9	0.040	8
Benefits Quarterly	0.057	9	0.118	9	0.019	8	0.030	9

*Adjusted from Colquitt et al. (2009) to reflect current sample of journals.

Table 5

Summary of Journal Rankings

2011-2015 versus 2001-2005

	Total Citations		Total Non-Self-Citations		Insurance Impact Factor		Adjusted Insurance Impact Factor	
Journal	2015	2005*	2015	2005*	2015	2005*	2015	2005*
Journal of Risk and Insurance	1	1	1	1	1	1	1	1
Journal of Risk and Uncertainty	2	2	2	2	2	2	7	5
Geneva Papers on Risk and Insurance Issues and Practice	3	4	3	5	5	6	5	7
Risk Management and Insurance Review	4	9	4	7	3	7	3	6
Journal of Insurance Regulation	5	3	5	3	6	3	4	2
Geneva Risk and Insurance Review	6	5	6	4	4	4	2	3
Journal of Financial Service Professionals	7	6	9	8	8	8	9	8
Journal of Insurance Issues	8	7	7	6	7	5	6	4
Benefits Quarterly	9	8	8	9	9	9	8	9

*Adjusted from Colquitt et al. (2009) to reflect current sample of journals.

CONCLUSION

In this article, we present citation data for nine leading risk and insurance journals for the period 2011-2015. We show how often each sample journal cited itself and each of the other sample journals. Insurance Impact Factors are also calculated to demonstrate per-article impact of the journals, both including and excluding self-citations. The journals are ranked based on total citations, non-self-citations, impact factors, and adjusted impact factors. Results for 2011-2015 are compared to those of 2001-2005.

As found in previous studies, the *Journal of Risk and Insurance* is without question the leading journal in the field in terms of impact, regardless of the criteria used. *Risk Management and Insurance Review* exhibited the most significant growth in impact over the decade. For example, in terms of the Insurance Impact Factor, *RMIR* jumped from seventh in the 2001-2005 period to third in the 2011-2015 period. The *Geneva Papers on Risk and Insurance Issues and Practice* also saw improvement, moving up to third in total citations and fourth in terms of the Insurance Impact Factor.

The results of this citation analysis should be helpful to authors, promotion and tenure committees, academic administrators, editors, librarians, and anyone else interested in evaluating the relative impact of risk and insurance journals.

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