ANNOUNCER: 00:02  [music] This podcast is brought to you by iLUminate, the Lehigh Business blog. To learn more, please visit us at business.lehigh.edu/news. [music]

JACK CROFT: 00:13  Welcome. I'm Jack Croft, host of the iLUminate podcast for Lehigh University's College of Business. Today is November 5th, 2021, and we're talking with Rebecca Wang and Mathew Isaac about the recent study they co-authored with Dr. Isaac's colleague, Carl Obermiller, titled “The Downside of Divinity? Reputational Harm to Sectarian Universities from Overtly Religious Advertising.” It was published in the Journal of Advertising. Dr. Wang is an assistant professor of marketing in Lehigh College of Business. Her research reflects her interests in marketing, data science, and technologies, and focuses on digital and mobile channels, social media, and data-driven marketing. Dr. Isaac is a professor of marketing at Seattle University, a Jesuit Catholic University in Seattle, Washington. His research focuses primarily on consumer judgment and decision-making, examining how contextual and motivational factors influence product evaluations and purchase intentions. Dr. Isaac, Dr. Wang, thank you so much for being with us today.

ISAAC: 01:23  Thanks for having us.

REBECCA WANG: 01:25  Yes, thanks for having us.

CROFT: 01:27  In an op-ed you also co-wrote with Dr. Obermiller for Higher Ed Drive, you concluded, and I quote: "In short, as leaders at religious schools navigate the challenges of demonstrating the value of higher education and managing enrollment, they need to realize that there may sometimes be a tangible and financial downside to divinity." So let's start in the beginning. What was the impetus for doing a study on how overtly religious advertising affects potential students' perceptions of a university or college's academic reputation?

MATHEW ISAAC: 02:05  Yeah. Actually, this project has been a long time in the making. I think the starting point was probably about seven or eight years ago. I was on a committee at Seattle University, which was looking at rebranding the university and trying to understand how our university is perceived. And as part of that work, we conducted some market research with current as well as prospective students in the area. And one thing we were interested in finding out was how prospective students perceived our affiliation as a Jesuit and Catholic university. And we were actually very surprised that many students really had a very different perception of some of those words, especially the religious framing of the university, than we had expected. And it started making us wonder whether the way in which we communicate and present ourselves as a religious university was potentially affecting other kinds of judgments, including judgments about the academic reputation of Seattle U. And so that started myself and Dr. Obermiller, who's a colleague of mine at Seattle U on this project. And we were thrilled to have Dr. Wang join as well to help us dig into this a bit more.

CROFT: 03:37  Dr. Wang, what was your interest in this question?
WANG: 03:42 So I am always interested in school rankings, and I think that's also a passion that Matt has. And it's interesting to know what kind of framing can impact a school or perceived perception by students. And I think that's an impactful question because every admissions officer probably worries about its rankings and how potential students would perceive them every fall, right? So just the fact that this is interesting to study. And then, also, I was able to help with some of the analyses, so. But, like I said, this really was Matt's project in terms of the inception of the idea.

CROFT: 04:38 For the purposes of the study, what did you consider as overtly religious advertising?

ISAAC: 04:44 That's a great question. I think we looked at a few different things. One thing that was interesting to us was trying to understand if even fairly subtle cues could make a difference in terms of being seen as more or less religious. So in this work, we conducted a number of experiments where oftentimes we provided participants with slightly modified descriptions of a university. Sometimes this was a fictional university because we didn't want people to bring in their own preconceptions about the university to the experiment. And we did a few things. In one study, we just manipulated the presence of a logo. So it was the exact same university that was described, but one included a logo featuring a Christian cross, whereas the other group of participants saw the exact same description, but without the cross presented. In another study, we had information, a little more descriptive information about the universities, in one case, highlighting its religious programs, in the other case, this was de-emphasized a bit. So again, the idea was to keep things pretty similar, but to try to understand if these small cues, be the logos or text descriptions, could make a difference in how participants judged the academic reputation of the university in various disciplines.

CROFT: 06:25 Is there anything you want to add to that, Dr. Wang?

WANG: 06:27 Just a school self-- its prescribed description and its mission. Perhaps some mentions of its religious values and traditions. I think the word tradition is probably one of the key words and also anything related to church or Bible, Christianity, of course, even Christmas and faith. All of these particular words can signal a school's religiosity.

ISAAC: 06:54 Yeah. Actually, Dr. Wang did a really interesting analysis for us because we wanted to understand whether there was variation in the amount of religious language that's being used on websites of sectarian universities. So there are about 879 sectarian or non-secular universities in the U.S. And we were curious whether, if we looked at the home pages of these universities, whether we would find differences in the amount of religious content. And so I don't know, Rebecca, if you want to talk a little bit about that analysis. But I think that was really valuable in kind of convincing us that there's a lot of differences in how universities communicate.

WANG: 07:45 Yeah. So there really is a wide range. So what I did was-- there's a list of, I guess, Catholic universities in the U.S., maybe 200 or so web links. So what I did was I looked through all the web links and basically scraped the texts from those home pages and then basically do some simple text analysis and then calculate how many religious words using a software called LIWC [Linguistic Inquiry and Word Count]. So it's language inquiry of word count by Dr. [James W.] Pennebaker. So it's a very established method, established dictionary. So using that dictionary, I looked at how many words are considered religious and how many words of these web pages are used. What's the percentage of that? And it really is a wide range. I think some
universities may only have half a dozen and some can literally range in the hundreds, right, of just the home page alone. Yeah. And some of the words that really show up, like the ones that I just said, so church being one, faith being one. Saint is a big one as well. Theology and seminary, chapel. So all of these are religious words that would signal how religious a school is.

ISAAC: 09:18 One thing I think we realized too from doing this analysis or that came to mind is that this may not be strategic decisions that are being made by each of these religious universities. So even though we see this variation in the amount of religious content that's appearing on their home pages, we weren't sure if that was really a strategic decision that had been made by marketing teams at these universities. And instead, it might have been just the product of legacy websites and how things have been communicated over time. And yet, our thought was this could be having some pretty major impacts on how potential students, potential donors, etc., are viewing the university. And so that kind of led us to some of the experimental studies that followed.

CROFT: 10:08 So let's briefly then talk about what some of the main findings from the study that leaders of, in particular, religious universities and colleges need to know. And we’ll come back and talk about each of them in some detail after. But just kind of the highlights of what you found.

ISAAC: 10:30 Rebecca, do you want me to start here, or do you want to start?

WANG: 10:33 Yes. And you also met with your school, right, to discuss this issue.

ISAAC: 10:38 Yeah. Actually, I think for sure this issue is particularly relevant to religious universities, and ours is one. And so actually, the board of trustees at our university invited us last quarter to come in and talk to the president, the provost, and the board about some of the findings from this research and how that might impact religious universities. So it's all always great to see the results of academic research being disseminated in that way. And in our case, I think it is applicable to Seattle University and other religious universities. And so in terms of the main findings, I think the first is that even these fairly subtle religious cues that we've been discussing can, it seems, impact judgments about the academic quality at a university. And yet, that doesn't happen across the board necessarily, but it is very specific to disciplines. So it's perhaps not surprising that if a university advertises as being-- or comes across as being more religious based on the use of certain cues or content, that it is considered to be stronger in a religious-related disciplines, things like divinity, theology, those kinds of things. And in fact, that's what we find.

ISAAC: 12:09 But what we also see is that the university seems to be penalized in other disciplines, and it's not across the board, as they said. It seems that science and engineering is in particular penalized. So we see that universities that when they advertise more in terms of religious cues and icons and things like that, they're seen as being worse in terms of academic quality for their science and engineering programs. And also, we saw a similar effect in other quantitative areas, including business and economics. So that's, I think, one of the big findings that people do seem to make judgments about the university’s academic quality, and they do it in the discipline-specific way where disciplines that are closely related to religion are-- we see increased ratings, but disciplines that are more science-focused seem to suffer as a result.
And how does the concept of zero-sum outcomes and resource allocation factor into what the study found?

Zero-sum allocation refers to a person's way of processing judgments, basically. And they assume that people make tradeoffs in their decisions. So in this case, right, science versus religion, you would automatically assume that one strength would come at the cost of the other because the idea is you only have so many resources available, so it is zero-sum. So if one is stronger, then the other one must be weaker because the total sum of resources stays fixed. So zero-sum allocation is essentially a short way of saying that. So since humanities and religious studies, or perhaps even art, history, and literature, they lean toward more theology and religion, it's more closely aligned with that. So when I make a judgment, a religious school is very strong, right, and seems to put a lot of emphasis and focus and perhaps even resources on religion. So they must have taken away from some science.

And just to add to that, I mean, I think the interesting thing is in our experiments, it wasn't the case that participants had to assume zero-sum thinking. So we showed them an advertisement or a description of a university, which was either slightly more or slightly less religious. And then we asked them to evaluate the quality of the university on various dimensions. And they could have given us high ratings on all of them. We didn't tell them that there was any zero-sum at work here. So they could have provided higher ratings across the board, but they did it. What we found is they engaged in the zero-sum thinking where they increased evaluations of these religious and arts, humanities, more qualitative-type disciplines, but they decreased significantly evaluations of the science disciplines. And we also had some studies where we asked about resources directly. And we found that participants seemed to think that a university that is advertising its religious background is probably devoting relatively more of its fixed resources to disciplines like divinity and theology, and relatively less to science and engineering. And that's an issue for sure for religious universities. Given the growth and interest in STEM and STEM fields, the last thing a university like Seattle U, even though it is a religious university, wants to communicate is that it's not investing in STEM.

Tension between religion and science has always existed, so dating all the way back to the Middle Ages, I guess when you believed that, at that time, if you believed the sun revolves around the Earth and then if you say otherwise, they say you should be burned at a stake. So fundamentally, I think the two require-- right, religion versus science, they require reasoning from very different perspectives, and it has a historical-- it has a history of that. If we can track that, it dates back hundreds of years. And also fundamentally religion and science, they establish truths differently. So religion, right, if I were religious, truth is grounded in a non-empirical system, if you will, that relies on my ultimate commitment to faith, right? In science, on the other hand, it's all about empirical observations and logic and evidence, right? It does not require that commitment to faith. In fact, it repels, right? Everything should be evidence-based.
So I think it's because of this conflicting archetypes between the two that makes people-- and the fact that there is a history that we look back on that people fundamentally tradeoff between science and religion. So I think because of that, when considering how good or how academic a university is, that individuals might be more inclined to look at these religion programs, right, as religious-related programs like literature and art, history, and the humanities to be stronger in a religious setting as opposed to science. And again, I think it's because people rely on zero-sum thinking. And zero-sum thinking automatically kicks in, particularly because this opposite tension between religion and science.

Could follow up with Dr. Isaac on this that what's particularly interesting to me about this is that even those who consider themselves religious were less likely to rate the science programs highly. And I understand there's probably less of a difference than those who do not, but still that there's something going on, even with those who have a strong faith tradition and kind of questioning that conflict between science and religion.

I would say that we were surprised by the data a bit. I think we thought that maybe we might see some sort of halo effect among religious individuals where they might view a university that advertises heavily in terms of religion to be strong across the board, but maybe we'd find a different pattern among those who self-reported as non-religious. And that's not what we found. So I agree that it was a little bit surprising. But to Rebecca's point, I think this could be driven not necessarily by this conscious acceptance or belief in this religion-science narrative. I think for many people that this conflict narrative, we may not really believe it, irrespective of where you fall in terms of your religious beliefs. We know that there are many scientists who are religious. And so it's not necessarily that these that this conflict must be. But it could be something that's driven by almost this unconscious kind of relationship that we have become associated with over the years that it shows up when we're making these kinds of judgments even if we don't specifically adhere to those conflicts' narrative.

The three authors on the study are all in business schools. And I also found it interesting that in addition to the way that STEM programs are perceived by students based on overtly religious advertising, that so are schools' business and economics programs. What's going on with that?

I think it's probably because people think about science and religion or hard science, soft science on the spectrum. So even though we do see the effects being strongest for STEM fields, but we still observe that effect with business and economics fields because we still rely on data and evidence, right, in business arenas, whereas humanities and literature really, it's, relatively speaking, more aligned with religious studies. So that's my take.

Yeah. And we ran six experiments with almost 2,500 participants for this article. And I think in general, what we find is this positive effect of religious advertising on judgments of disciplines directly related to religion-- theology and ministry, religious studies. And we find a very clear negative effect when you're looking at science and engineering, but it was almost as strong for business and economics. For arts and humanities, the effects were a little more mixed and harder to document across studies. But I would definitely agree with Becky that we certainly seem to think it's
related to logic and quantitative methods, and that is something that is constant or consistent between STEM and business and economics, and maybe less so when you think about religious studies or even arts and humanities. And so that could explain why we see this pattern.

CROFT: 23:20

Okay. I think that kind of brings us to the main takeaways here, lessons that others could learn from this, particularly as the study mentions interest in STEM education is increasing the number of students who are seeking to major in the STEM field and get those degrees. So for those universities that are looking to attract people to science and engineering, as well as technology and mathematics, or for that matter, for business and economics, what is the main takeaway? It seems like if you have programs in both religion studies and science and engineering, that a one-size-fits-all approach is not the best way to go.

WANG: 24:09

Right. So I think it’s important for a university to segment their students by their intended majors or interests and then craft personalized messages, emphasize more or less of a university strength or religious background. Because you don’t really know whether-- there isn’t a one-size-fits-all, right, sending the same message to everyone. Some people might be more interested in humanities, and that probably would be the right message to them. But then, if someone else is interested in STEMs, especially STEM fields are growing, both in terms of student interest and also degrees awarded in recent years, it’s very hard for them to be perceiving your school to be better than others if you send just a blanket message. So I think it’s important to do some sort of customization.

ISAAC: 25:10

And I think one of our central messages is not that we’re telling religious universities they have to walk away from being a religious university, especially if that’s a key part of their identity. But really, just to be aware of how communicating the religious aspect of their identity might have repercussions that they were not aware of. And so I think it could be as simple as just being extra careful to really communicate the STEM aspects or the science aspects of the university earlier. You might do both, but maybe in a communication about Seattle U, we should be stressing the fact that we have a new Center for Science and Innovation earlier in the message so it doesn't get lost or overlooked because people really seem to focus on religious cues. So that's, I think, one big takeaway. The other thing I'd like to mention, too, is that even though our work looked just at religious advertising in the context of higher education, I think that there could be some implications for this work for the many other types of religious organizations that are out there, outside of higher ed. There are many. Hospitals. You can think of donation centers, charities, etc. And it could be that for all of these religious organizations, consumers might be making these kinds of judgments that they may not realize based on the fact that they are using religious cues more or less in their communications.

ISAAC: 26:54

I do think that the zero-sum idea is pretty interesting theoretically. And that’s something where I think there could be a lot of work done further, not just in terms of religion and science, but thinking about when are consumers going to make these kinds of zero-sum inferences and when will they not? For example, there's some work in the past showing that if you think a product is green or sustainable, you might think it's less effective at its intended purpose. And it's really interesting, I think, to understand when and why consumers engage in zero-sum thinking and when they
don't. And I think that would be a great future direction to go from some of this research.

CROFT: 27:39

Well, I'd like to once again thank my guests, Dr. Rebecca Wang and Matthew Isaac. Dr. Wang's research has been published in such leading journals as *Journal of Marketing Research, Journal of Consumer Research, Journal of Retailing, Journal of Interactive Marketing,* and *Computers and the Human Behavior.* Dr. Isaac's research has been published in *Journal of Consumer Research, Journal of Marketing Research, Journal of Marketing, Journal of Consumer Psychology,* and *Journal of Advertising Research,* among others. This podcast is brought to you by *ilUMinate,* the Lehigh Business blog. To hear more podcasts featuring Lehigh Business thought leaders, please visit us at business.lehigh.edu/news. And don't forget to follow us on Twitter @LehighBusiness. This is Jack Croft, host of the *ilUMinate* podcast. Thanks for listening. [music]