

# Notes on VISOR Results (for JAAR Paper)

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## Introduction

This document introduces the VISOR dataset informing the JAAR paper presenting analyses of VISOR results. It refers to the VISOR results workbook “20200816 VISOR Paper for JAAR - Analysis.xlsx.”

## The VISOR Analysis Workbook

Tab Name	Content
VISOR Info	Basic info about the survey and sample, explaining how we settled on N=499 for the inclusive sample for analysis.
Sample (N=499) Demographics	Provides a demographic description of the N=499 sample for analysis.
Variable Names for all Tests	Lists and defines all variables and their possible values.
AI Info & Spec & Affiliation Groups	<p>The Academic Identity (AI) survey is critical for identifying the characteristics of VISOR participants, including their academic specializations.</p> <ul style="list-style-type: none"> <li>• The six main specializations are based on self-assignment: Ethics (20; ai_spec_ethics), Groups (116; ai_spec_groups), Histories (80; ai_spec_histories), Ideas (108; ai_spec_ideas), Minds (122; ai_spec_minds), Texts (49; ai_spec_texts).</li> <li>• We add MindsVsGroups (ai_spec_mindsvsgroups; 1=Minds [122], 2=Groups [116], 0=Neither).</li> <li>• We define two further overlapping groups based on whether Groups (232; ai_spec_groupsmentioned) or Minds (178; ai_spec_mindsmentioned) are mentioned as 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> priority.</li> <li>• Finally, we introduce a comparison variable MindsMentionedVsGroupsMentioned (ai_spec_mindsmentionedvsgroupsmentioned), which excludes overlaps (1=MindsMentioned [115], 2=GroupsMentioned [169], 0=Neither [152]).</li> </ul>

	<p>At the top, we define detailed subgroups for specializations, but numbers are too small so this is not used. The focus here is on professional affiliation groups. Affiliation groups are defined based on whether a respondent said they are or were a member. Some of those groups are:</p> <ul style="list-style-type: none"> <li>• AAR (286)</li> <li>• AphilA (21)</li> <li>• APsyA (66)</li> <li>• ASCH (50)</li> <li>• ASR (27)</li> <li>• APracTheo (6) – too small to analyze separately but they go into ai_af_theo</li> <li>• MERCOSUR (2) – too small to analyze separately but they go into ai_af_soc</li> <li>• IAPracTheo (4) – too small to analyze separately but they go into ai_af_theo</li> <li>• IAPsyR (34)</li> <li>• IACSR (21)</li> <li>• IAHR (54)</li> <li>• NAASR (31)</li> <li>• SSSR (86)</li> <li>• SBL (66)</li> <li>• SCE (16) – too small to analyze</li> </ul> <p>For analysis, we create combo affiliation groups for potentially interesting contrasts, assigning current overlaps to the smaller group, as follows:</p> <ul style="list-style-type: none"> <li>• ai_af_aariahr [1=iahr (54), 2=aar (248), 0=neither; current affiliations preferred; overlaps go to iaahr]</li> <li>• ai_af_aariacsr [1=aar (273), 2=iacsr (21), 0=neither; current affiliations preferred, current and former overlaps assigned to IACSR]</li> <li>• ai_af_aarnaasr [1=aar (258), 2=naasr (31), 0=neither; current affiliations preferred, current and former overlaps assigned to NAASR]</li> <li>• ai_af_aarsbl [1=aar (253), 2=sbl (57), 0=neither; current affiliations preferred, current and former overlaps assigned to SBL]</li> <li>• ai_af_aarsssr [1=aar (235), 2=sssr (86), 0=neither; current affiliations preferred, current and former overlaps assigned to SSSR]</li> <li>• ai_af_iacsr [1=iacsr (21), 0=other]</li> <li>• ai_af_phil [APA and 6 other groups focusing on philosophy; 1=all philosophy groups (35), 0=other]</li> <li>• ai_af_psy [APA and IAPR; 1=all psychology groups (65), 0=other]</li> <li>• ai_af_psyvsoc [1=all psych groups (65), 2=all soc groups (71), 0=other; current affiliations preferred; current overlaps excluded; SSR people go to SOC unless members of APA, in which case they go to psych]</li> <li>• ai_af_soc [ASR, ASSR-MERCOSUR, SSSR; 1=all sociology groups (98), 0=other]</li> <li>• ai_af_theo [12 groups focusing on theology; 1=all theology groups (47), 0=other]</li> </ul>
AI AAR Clusters	<p>On this tab, we implement definitions of AAR clusters (obviously, only for AAR members, current and former). Clusters are built from participants' identification of AAR units they like to attend (up to five per person). The resulting cluster groups are as follows.</p> <ul style="list-style-type: none"> <li>• Themes: Culturally Related (148; ai_int_aarcluster_cult)</li> <li>• Themes: Socially Related (96; ai_int_aarcluster_soc)</li> <li>• Themes: Body Related (90; ai_int_aarcluster_body)</li> <li>• Themes: Racial, Ethnic, Indig (99; ai_int_aarcluster_ethn)</li> <li>• Themes: Gender &amp; Sexuality (82; ai_int_aarcluster_sex)</li> <li>• Themes: Critical Theory (109; ai_int_aarcluster_crit)</li> <li>• Non-Christian Religions: All (273; ai_int_aarcluster_nonchr)</li> </ul>

	<ul style="list-style-type: none"> <li>• Non-Christian Religions: Abrahamic (66; ai_int_aarcluster_nonchr_abrah)</li> <li>• Non-Christian Religions: Dharmic (112; ai_int_aarcluster_nonchr_dharm)</li> <li>• Non-Christian Religions: Other (91; ai_int_aarcluster_nonchr_other)</li> <li>• Christianity (154; ai_int_aarcluster_chr)</li> <li>• Scientific Study of Religion (199; ai_int_aarcluster_ssr)</li> <li>• Theology (171; ai_int_aarcluster_theo)</li> </ul>
AI Results	Basic statistics from Academic Identity survey
AI x Dem	<p>Demographic profiles for Specialization Groups. There is an ANOVA for some and crosstabs for others, covering:</p> <ul style="list-style-type: none"> <li>• birth decade</li> <li>• education completed</li> <li>• employment status</li> <li>• gender</li> <li>• affluence ladder</li> <li>• race</li> <li>• politics-economy</li> <li>• politics-social</li> <li>• politics-overall</li> <li>• politics-interest</li> <li>• politics-US party lean</li> <li>• religion-importance</li> <li>• religion-orthodoxy</li> <li>• religion-service attendance</li> <li>• religion-main identification</li> <li>• US residence</li> <li>• US residence-state</li> <li>• US residence-region</li> <li>• Non-US country of residence</li> <li>• student status</li> <li>• doctoral student status</li> </ul>
MNMS Info	Description of the Methodological Naturalism, Methodological Secularism (MNMS) survey.
MNMS Results	Results from the MNMS survey, including catch-and-calibration analysis, scale reliability, factor analysis, and MN vs MS scatter plot.
MNMS x AI, Dem	MNMS results for subgroups derived from the AI and Demographics surveys.
SV Info	Description of the Scholarly Values (SV) survey, including both the (very slightly modified) Schwartz Values Survey (SV2) and the (new) Academic Values survey (SV1).
SV1 (Acad) Results x AI, Dem	SV1 (Academic) results for subgroups derived from the AI and Demographics surveys.

SV2 (Schwartz) Results x AI, Dem	SV2 (Schwartz) results for subgroups derived from the AI and Demographics surveys.
SVS Info	Description of the Scholarly Values Scenarios (SVS) survey
SVS Results	Results from the SVS survey, including descriptive statistics, correlations, ANOVA for Specialization Groups, and scale reliability.
SVS x AI, Dem	SVS results for subgroups derived from the AI and Demographics surveys.
Stats – Index for Papers	This tab presents an index for all tests run in preparation for paper publications. It lists SPSS code for Crosstabs and One-way ANOVAs and the group variables for which those tests are run, indicating on which tab the test results can be found.
JAAR Summary	Summary of results from the remaining tabs. Some tests have low N and those calls are shaded red. This arises because some optional VISOR tests were additional to the main ones (AI, MNMS, SV, SVS). These include Big Five, MRI, DSI, and some religious belief and practice items from Barna, Pew, Ammerman, etc. A few people did the extra surveys but not many so N is often rather low, particularly when considering subgroups.
The remaining tabs	<p>These are named JAAR-XXXXXXX because they are relevant to the JAAR papers. The top of each tab states what analyses are present on the tab. There are individuals tabs for:</p> <ul style="list-style-type: none"> <li>• 13 affiliation groups</li> <li>• 6 specialization groups</li> <li>• 25 AAR cluster groups</li> <li>• 25 AAR trimmed cluster groups</li> <li>• 13 tabs comparing AAR cluster groups with various other groups</li> </ul>

## Variable Names for All Tests

The key variables used in the VISOR surveys are below. NB: VISOR participants were invited to take tests besides the SV, SVS, MNMS, and AI surveys. A few did so, but the numbers are only a fraction of the entire pool (N=499). When they are very low, significant results are not reported. Details are on the “Variable Names for All Tests” tab.

### Demographics Survey

Participants take this survey when they register on the survey site so we have results for our entire participant pool (N=499).

#### Basic Demographics

dem\_birthyear\_group 1930=born in 1930s, 1940=born in the 1940s, etc.

dem\_educomp\_group 1=0-15 years of education completed, 2=16-18 years completed, 3=19-20 years completed, 4=21-24 years completed, 5=25+ years completed

dem\_emp\_status unemployed=not employed, ptgood=parttime and not looking for more, ptmore=parttime and would like more, ft=fulltime, retired, empnotneeded=employment not needed, decline

dem\_gender F=female, M=male, O=other

dem\_ladder\_group ladder runs from 1 to 10; ladder groups are as follows: 1=levels 1-4, 2=levels 5-6, 3=level7, 4=level 8, 5=levels 9-10

dem\_race 0=decline, 1=African, 2=Caucasian, 3=East Asian, 4=Hispanic, 5=Middle Eastern, 6=Native American, 7=South Asian, 9-Multiracial

dem\_student no, yesft=fulltime student, yespt=parttime student

dem\_student\_doctoral yes, no

#### US Residents Only

dem\_Usresident yes, no

dem\_USstate Name of US state

dem\_USregion Four standard regions of the USA based on state of residence (West, Mid-West, South, Northeast)

dem\_Usvotingreg Eligible to vote but not registered, Not eligible to vote in the USA, Prefer not to answer, Registered as Democrat, Registered as Independent, Registered as Republican, Other

#### Politics

dem\_pol\_imp\_scale 1=Not at all interested, 2=Not much interested, 3=Somewhat interested, 4=Very much interested

dem\_pol\_econ\_scale 1=Very liberal, 2=Liberal, 3=Slightly liberal, 4=Moderate, 5=Slightly Conservative, 6=Conservative, 7=Very Conservative

dem\_pol\_social\_scale 1=Very liberal, 2=Liberal, 3=Slightly liberal, 4=Moderate, 5=Slightly Conservative, 6=Conservative, 7=Very Conservative

dem\_pol\_overall\_scale 1=Very liberal, 2=Liberal, 3=Slightly liberal, 4=Moderate, 5=Slightly Conservative, 6=Conservative, 7=Very Conservative

dem\_pol\_USpartylean Answered by everyone, not just US residents: Democrat, Independent, Republican, Decline

## Religion

dem\_rel\_imp\_scale 1=Not at all interested, 2=Not much interested, 3=Somewhat interested, 4=Very much interested

dem\_rel\_orthodoxy 1=Very liberal, 2=Liberal, 3=Slightly liberal, 4=Moderate, 5=Slightly Conservative, 6=Conservative, 7=Very Conservative

dem\_rel\_services\_scale 1=Never, 2=Once a year or less, 3=A few times a year, 4=Once or twice a month, 5=Almost every week, 6=Every week or more than once a week

dem\_rel\_tradmain Agnostic, Atheist, Bahai, Buddhist, Christian, Hindu, Humanist, Jewish, Muslim, Neopagan, Newage, None, Other

## Methodological Naturalism Methodological Secularism Survey (MNMS)

We invented this one. Items are likert 1-6 so the two dimensional totals range from 1=low to 6=high. Both the MN and the MS subscales are robust with high alphas and a confirmatory factor analysis shows that items fit closely into these two dimensions, as designed. See the MNMS Info tab for details.

visor\_mnms\_mn Methodological Naturalism: Preference for academic arguments that optimize the use of theories, hypotheses, methods, evidence, and interpretations that do not appeal to superhuman agents.

visor\_mnms\_ms Methodological Secularism: Preference for academic practices that optimize the use of scholarly strategies that are not tied to the idiosyncratic interests of a religious coalition.

## Scholarly Values Survey (SV)

We adapted the Schwartz Values Survey for his one, including adding a bank of items directly related to scholarly values. They are visor\_sv\_01 through visor\_sv\_33, and correspond to the THIRD set of Schwartz-style items. We don't analyze the other two (yet). See SV Info tab for details.

Scoring: -1=opposed to the value, 0=value not important, 1, 2, 3=value is important, 4, 5, 6=value is very important, 7=value is of supreme importance.

## Scholarly Values Survey (SVS)

We invented this one, which measures religiosity integration (RI; low score 1-2) and religiosity exclusion (RE; high score 3-4) by means of logically incomplete questions about scholarly scenarios. See SVS Info tab for details and see below in this document for details on the theory and method behind the survey construction.

There is no total for the SVS items as they don't perform well together as a scale, meaning that the items don't represent the RI and RE constructs clearly. But the items can be used individually.

visor\_svs\_01 There is considerable disagreement about the value of having joint meetings between the Society for Biblical Literature (SBL), which focuses primarily on the holy texts of the Abrahamic religions, and the American Academy of Religion (AAR), which includes a broader range of disciplines and scientific approaches to the study of religion. Some argue that the joint meetings are particularly valuable for those AAR members who are not themselves religious, because it gives them a chance to interact with SBL scholars whose research is grounded in a particular community of faith. Whether or not you agree with this argument, which of the following statements (if true) would support it most?

- RE Option: Secular AAR members do not get very many opportunities to interact with religiously affiliated people.
- RI Option: The scholarship and collegiality of religiously active SBL members is often strengthened by their commitment to a faith community.

visor\_svs\_02 The members of a committee charged with resolving budget problems at a major private University have to decide whether to close the Divinity School, which has experienced a serious drop in enrollment. The chair of the committee argues that it should be closed because enrollment is not likely to improve since fewer young people are interested in studying for the ministry. Which of the following statements (if true) would most weaken this argument?

- RE Option: Enrollment could go up if the Divinity School were redesigned as a Department of Religion that taught more scientific approaches to the study of religion.
- RI Option: Enrollment is low at the Divinity School because its faculty are overworked and too busy to strengthen ties to religious communities having prospective students.

visor\_svs\_03 The Dean of the social sciences department at a regional college heard that an adjunct professor was discussing the spiritual value of the sort of Hindu contemplative practices that were part of his own religious tradition in his sociology of religion courses. The Dean called him into her office to inform him that she would not be offering him an annual contract in the future unless he agreed to stop. The adjunct professor protested. Which of the following claims would make his protest more compelling?

- RE Option: The teaching policies in the faculty handbook, which have not been updated for several years, do not specifically forbid this sort of approach in the classroom.
- RI Option: While it may not play as important a role in fields like biology or chemistry, discussing one's personal faith commitments when covering religious themes in class can enhance the learning experience.

visor\_svs\_04 Dr. Jones is a well-respected senior scholar in New Testament studies. For over thirty years, he has been a professor at a Christian seminary, a favorite among students and often sought out for advice on ministry situations. He is also editor of a scholarly



book series, in which several of his former students have been published. Many people associate outcomes of this sort with likely nepotism. Which of the following can more easily be inferred from this association?

- RE Option: People are often able to detect nepotism even when it is veiled by claims to scholarly objectivity.
- RI Option: People can often confuse advocacy for brilliant young researchers with favoritism.

visor\_svs\_05 A professor who teaches medieval philosophy at a University with a strongly Jewish heritage is an outspoken critic of the emphasis on "law" in Jewish ethics. He was once an active rabbi, but became an atheist a few years ago, and is now one of the most popular professors at the University. Last year it was discovered that he had an affair with a student who had been his research assistant prior to the affair. The disciplinary committee required him to take off the fall semester, during which he would receive weekly counseling. He will begin teaching again in the spring. In the wake of this intervention, which of the following outcomes is more likely?

- RE Option: After a semester break with counseling, the professor will learn something new about himself and become an even more effective teacher.
- RI Option: The professor may learn something new about himself, but the damage to his reputation will weaken his effectiveness as a teacher at the University.

visor\_svs\_06 An associate professor at a State University, who is also an Eastern Orthodox priest, has begun wearing his religious robes and a cross on his neck while teaching. The administration has heard complaints from several students. At his annual review, the Dean asks him not to dress in this way when engaged in official school activities. The associate professor argues that his behavior is appropriate. Which of the following assertions, if true, would be more relevant for strengthening the associate professor's argument?

- RE Option: Freedom of expression in a university classroom should not be curtailed for either students or faculty.
- RI Option: The learning experience is enhanced when teachers express their own sense of identity, including their commitment to a faith community, in their lectures.

visor\_svs\_07 The president of a religiously affiliated college that requires its faculty to sign a "statement of faith," which includes an affirmation of biblical inerrancy, is part of a committee set up by the regional accrediting agency to study the effect of such policies on academic excellence. In the first meeting of the committee, the president argues that professors in his school have more academic freedom because they are not pressured by secular colleagues to accept metaphysical naturalism and can pursue their research as they wish. What of the following pieces of evidence, if true, would most strengthen the president's argument?

- RE Option: Surveys indicate that only 50% of scholars who have published in top academic journals explicitly affirm metaphysical naturalism.
- RI Option: Surveys indicate that scholars who teach at institutions with a statement of faith report 50% higher job satisfaction than faculty at other schools.

## Academic Identity Survey (AI)

We created these items based on established items used in other surveys.

### Audience for Scholarly Work

(likert 1-5 where 1=not at all important and 5=very important)

ai\_aud\_imp\_public    General Educated Public

ai\_aud\_imp\_relinstlead    Leaders of Religious Institutions

ai\_aud\_imp\_relinstmem    Members of Religious Institutions

ai\_aud\_imp\_relinstschol    Scholars within Religious Institutions

ai\_aud\_imp\_relschol    Scholars of Religious Studies

ai\_aud\_imp\_secacad    Secular Academy

### Institutional Location

ai\_inst\_rank    Rank: Doctoral student, Post-doctoral fellow, Adjunct professor, Assistant professor, Associate professor (reader), Professor, Professor Emeritus, I am retired, I do not have an academic position (including independent scholars), Other

ai\_inst\_requires\_sof\_summary    Institution Requires a Statement of Faith (1=Yes, 0=No)

ai\_inst\_senior\_admin    Most Senior Administrative Role Held: Department head/chair, Dean of a school, Provost of a college or university, I have not held a senior academic administrative position, Other senior academic administrative position

ai\_inst\_tenure    Tenure Status: On tenure track, Tenured, My institution does not have tenure, I have an academic position and my institution has tenure but I am neither on tenure track nor tenured, I am retired, Other

ai\_inst\_type    Type of Institution: Community college (no four-year bachelor degrees offered), Religiously affiliated college (no doctoral degrees offered), Not religiously affiliated college (no doctoral degrees offered), Religiously affiliated research university (doctoral degrees offered), Not religiously affiliated research university (doctoral degrees offered), Research university divinity school, Denominational or independent seminary, Other religious institution, I have no such primary place of employment, Other (please explain)

## Religious Identity Survey (RID)

RID digs deep into the specifics of a person's religious identity, including generating a variety of measures of belief and practice.

Based on the answer to main religious identity, the RID branches into specific traditions (Judaism, Christianity, Islam, Hinduism, Buddhism, etc.).

#### Items from Barna Conservatism Scale

rid\_BarnaCons\_total Only total analyzed; 1=liberal to 5=(very) conservative

#### Items adapted from an Ammerman Survey

rid\_AMMSP\_ETH My spirituality is about living a good life, overcoming selfishness, and caring for others. 1=Strongly disagree to 5=Strongly agree

rid\_AMMSP\_GOD My spirituality is about God and striving to become closer to God (as I understand God). 1=Strongly disagree to 5=Strongly agree

rid\_AMMSP\_NAT My spirituality is about experiences of awe and beauty in nature and community. 1=Strongly disagree to 5=Strongly agree

#### Items from Pew Surveys

...Collected Item When is the last time you took part in the following religious or spiritual activities?

rid\_PEWACT\_DIS Discussing religious attitudes with friends or neighbors. 1=In the last week, 2=In the last month, 3=In the last six months, 4=In the last year, 5=More than a year ago, 6=Never

rid\_PEWACT\_MED Praying or meditating for religious or spiritual reasons. 1=In the last week, 2=In the last month, 3=In the last six months, 4=In the last year, 5=More than a year ago, 6=Never

rid\_PEWACT\_SER Attending a religious service (other than a wedding or a funeral). 1=In the last week, 2=In the last month, 3=In the last six months, 4=In the last year, 5=More than a year ago, 6=Never

rid\_PEWACT\_TXT Reading from my religious tradition's sacred texts. 1=In the last week, 2=In the last month, 3=In the last six months, 4=In the last year, 5=More than a year ago, 6=Never

rid\_PEWACT\_VOL Volunteering to help people for religious or spiritual reasons. 1=In the last week, 2=In the last month, 3=In the last six months, 4=In the last year, 5=More than a year ago, 6=Never

rid\_PEWAL How confident are you that there is some form of life after death? 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

...Collected Item How confident are you about each of the following forms of life after death?

rid\_PEWALTYPESHEAV Heaven 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWALTYPESHELL Hell 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWALTYPESNIRV Nirvana 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWALTYPESREIN Reincarnation 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWANC How confident are you that there are ancestors, ghosts, jinns, or other supernatural beings? 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWANG How confident are you that there are angels and demons? 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWGOD How confident are you that there is a God or a Universal Spirit? 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

rid\_PEWGODIDEA What is the best way to describe your idea of God or God or Universal Spirit? 0=Personal God, 1=Impersonal Force, 2=Both a Personal God and an Impersonal Force, 3=I have some other idea of God or Universal Spirit, 4=I don't believe in God or a Universal Spirit, 5=I don't know

rid\_PEWMIR How confident are you that there are miracles? 5=Absolutely certain, 4=Fairly certain, 3=Not too certain, 2=Not at all certain, 1=Don't believe, 0=Don't know

#### Self-Rating Items

rid\_ORTHSELF I consider myself orthodox or conventional in my religious or spiritual beliefs. 1=Strongly disagree to 5=Strongly agree

rid\_SELFREL I consider myself a religious person. 1=Strongly disagree to 5=Strongly agree

rid\_SELFNR I am comfortable calling myself "spiritual but not religious." 1=Strongly disagree to 5=Strongly agree

rid\_SELFSP I consider myself a spiritual person. 1=Strongly disagree to 5=Strongly agree

rid\_SPEC When it comes to religion or spirituality, I consider myself... 1=Very liberal, 2=Liberal, 3=Slightly liberal, 4=Moderate, 5=Slightly Conservative, 6=Conservative, 7=Very Conservative

## Tradition-Specific Items

rid\_TRADMAIN                    "Primary religious tradition self-identification: 1=Jewish (including Orthodox, Conservative, Reform, Other),

2=Christian (including Catholic, Eastern Orthodox, Protestant, Pentecostal, Other),

3=Muslim (including Shiite, Sunni, Other)

4=Hindu (including Shivite, Vishnavite, Other),

5=Buddhist (including Mahayana, Teravada, Tibetan, Other),

6=Sikh,

7=Ba'hai,

8=Confucian,

9=Daoist,

10=New Age

11=Neo-Pagan (including Wiccan),

12=Shamanistic traditions,

13=Atheist,

14=Agnostic,

15=Humanist,

16=None,

17=Other"

If rid\_TRADMAIN=Buddhism

rid\_BuddhistCons\_trad            1=Mahayana, 2=Theravada, 3=Tibetan, 4=Non-religious/cultural, 5=Other

rid\_BuddhistCons\_total           Items are Like 1-7 so the total ranges from 1=very liberal to 7=very conservative

If rid\_TRADMAIN=Christianity

rid\_christian\_labbest 1=Strongly Identify, 2=Moderately Identify, 3=Neutral, 4=Moderately Do Not Identify, 5=Strongly Do Not Identify to the following labels: Bible-believing, Born Again, Mainline Christian, Theologically Conservative, Evangelical, Theologically Liberal, Liberal Evangelical or Evangelical Liberal, Progressive Evangelical, Moderate, Moral Majority, Seeker, Religious Right, Fundamentalist, Charismatic, Pentecostal

rid\_christian\_trad 1=Catholic, 2=Eastern Orthodox, 3=Anglican/Episcopalian, 4=Protestant - Lutheran, 5=Protestant - Reformed or Presbyterian, 6=Protestant - Baptist or Anabaptist, 7=Protestant - Methodist or Wesleyan, 8=Protestant - Congregational, 9=Protestant - Historically Black Churches, 10=Protestant - Other, 11=Pentecostal, 12=Non-religious/cultural, 13=Other

rid\_ChristianCons\_total Items are Like 1-7 so the total ranges from 1=very liberal to 7=very conservative

If rid\_TRADMAIN=Hinduism

rid\_hindu\_trad 1=Shivite, 2=Vishnavite, 3=Non-religious/cultural, 4=Other

rid\_HinduCons\_total Items are Like 1-7 so the total ranges from 1=very liberal to 7=very conservative

If rid\_TRADMAIN=Judaism

rid\_jewish\_mem Are you a member of a synagogue or temple? If so, is that synagogue or temple: 1=Orthodox, 2=Conservative, 3=Reform, 4=Reconstructionist, 5=Renewal, 6=Independent, 7=Post-Denominational, 9=Other, 8=I am not a member of any synagogue

rid\_jewish\_trad 1=Orthodox, 2=Conservative, 3=Reform, 4=Reconstructionist, 5=Renewal, 6=Independent, 7=Post-Denominational, 8=Non-religious/cultural, 9=Other

rid\_JewishCons\_total Items are Like 1-7 so the total ranges from 1=very liberal to 7=very conservative

If rid\_TRADMAIN=Islam

rid\_muslim\_trad 1=Sunni, 2=Sunni - Hanafi, 3=Sunni - Shafi'i, 4=Sunni - Maliki, 5=Sunni - Hanbali, 6=Sunni - Salafi, 7=Shi'i, 8=Shi'i - Ja'fari, 9=Shi'i - Ismaili, 10=Shi'i - Zaydi, 11=Ahmadi, 12=Ibadi, 13=Nation of Islam, 14=Sufi, 15=Non-religious/cultural, 16=Other

rid\_MuslimCons\_total Items are Like 1-7 so the total ranges from 1=very liberal to 7=very conservative

### Big Five Personality Inventory

This is Oliver John's 42-item inventory, which leads to the five dimensional total scores. All items are Likert 1-5 so the totals range from 1=low to 5=high in each dimension of personality.

bigfive\_O Openness

bigfive_C	Conscientiousness
bigfive_E	Extraversion
bigfive_A	Agreeableness
bigfive_N	Neuroticism

### Dimensions of Spirituality Inventory (DSI)

This is a CMAC/Wildman survey, generating scores for 21 subdimensions grouped into five major dimensions. All items are Likert 1-5 so totals range from 1=low to 5=high in each of the dimensions and subdimensions.

<i>dsi3_tot_2AX</i>	<i>Axiological Ideals</i>
dsi3_tot_1AXab	Appreciating Beauty
dsi3_tot_1AXas	Axiological Sensitivity
dsi3_tot_1AXeg	Ethics/Goodness
dsi3_tot_1AXki	Kinesthetic
dsi3_tot_1AXtr	Pursuing Truth
<i>dsi3_tot_2BB</i>	<i>Belief &amp; Belonging</i>
dsi3_tot_1BBbe	Belief
dsi3_tot_1BBri	Ritual
dsi3_tot_1BBrt	Religious Tradition
<i>dsi3_tot_2MY</i>	<i>Mystical</i>
dsi3_tot_1MYaw	Awe
dsi3_tot_1MYmy	Mystery
dsi3_tot_1MYon	Oneness
dsi3_tot_1MYot	Transcendence
<i>dsi3_tot_2PE</i>	<i>Personal</i>
dsi3_tot_1PEco	Connection

dsi3_tot_1PEme	Meanings
dsi3_tot_1PEna	Non-Attachment
dsi3_tot_1PEpr	Practices
dsi3_tot_1PEse	Self
dsi3_tot_1PEst	Self-Transformation
<i>dsi3_tot_2TB</i>	<i>Spiritual Beings</i>
dsi3_tot_1TBda	Ancestors
dsi3_tot_1TBdv	Divinity
dsi3_tot_1TBsp	Spirits (angels, demons, etc.)

#### Multidimensional Religious Ideology Scale (MRI)

This is a CMAC/Wildman survey, generating scores for 3 dimensions and a total score from -6 (extremely liberal) to +6 (extremely conservative). This multidimensional instrument is capable of extremely fine-grained analyses of ideological stance.

mri1_6totb	Belief
mri1_6totm	Morality
mri1_6totp	Praxis
mri1_total	Total

### The Scholarly Values Scenarios Survey: Methodological Detail

The Scholarly Values Scenarios Survey (SVS) presents conditional-reasoning items that are designed to detect implicitly operative scholarly values, which may differ from what respondents are explicitly willing to say are their operative values. This section presents the conceptual apparatus needed to understand both the main construct of the SVS (“objectivity”) and the strategy employed to generate items that enable the SVS to measure objectivity.

#### 1. Constructs: “Scholarly Objectivity” and “Reflective Religiosity”

Because we are using a methodological tool (conditional reasoning assessment) that measures the *relative motive strength* between the



implicit components of two sets of motives, it is necessary to develop two distinct constructs: constructs of “motives” in relation to which a person can experience a conflict or tension that he or she resolves in ways that are dependent upon (or conditioned by) implicit *justification mechanisms* (JMs). JMs are “unrecognized (implicit, unconscious, automatic) biases to reason in ways that enhance the rational appeal of self-deceptive explanations” enabling the construction of ostensibly plausible rationalizations for the behavior of the reasoner (Lawrence R. James & James M. LeBreton, *Assessing the Implicit Personality through Conditional Reasoning*, Washington, DC: American Psychological Association, 2012, p. 29).

The measurement tool is meant to help us detect *implicit* biases that shape the different values and actions of scholars in the study of religion – *not* to assess the truth (or even the plausibility) of particular sorts of beliefs, nor to judge the appropriateness (or even the feasibility) of particular sorts of behaviors.

We are interested in the way in which different scholars deal with the *apparent* tension between the motive to pursue and maintain academic “objectivity” and the motive to incorporate elements of “religiosity” into their scholarly reflection. Our goal was to detect the extent to which scholars (in their capacity as scholars operating within an academic environment) follow – or resist – naturally evolved tendencies of the sort that engender religious belief and behavior. The theoretical framework for explaining the origin and function of these tendencies derives from the bio-cultural sciences of religion.

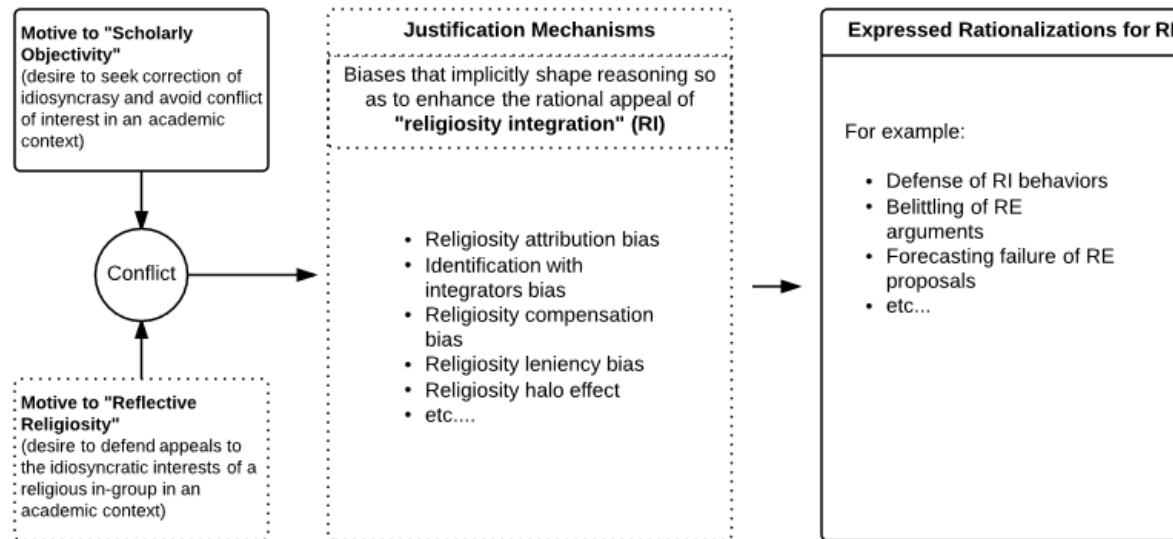
For the purposes of this study, “scholarly objectivity” (“objectivity” for short) refers to the motive to seek correction of idiosyncrasy and avoid conflict of interest in the construction and criticism of interpretations, hypotheses, theories, evidence, and methods. This functional definition applies to the academic study of religion and to any other scholarly endeavor.

For the purposes of this study, “reflective religiosity” (“religiosity” for short) refers to the motive to defend interpretations, hypotheses, theories, evidence, and methods that utilize or support appeals to the idiosyncratic interests of in-groups whose cohesion depends in part on shared imaginative engagement with axiologically relevant supernatural agents. This functional definition applies to reflection in academic as well as other contexts.

## 2. Conflict and Rationalization

Sometimes scholars can experience a conflict between these two sets of motives (tendencies, proclivities, or implicit dispositions expressed in different concrete practices), as when a person who is religiously affiliated feels torn between supporting the beliefs of her religious in-group and avoiding an apparent conflict of interest.

The “**VISOR Conflict of Motives**” chart (see Figure 1) provides a visual representation of this *conflict* (the boxes on the left), and the way in which implicit *justification mechanisms* (the central box) can mediate the explicit conscious output of *expressed rationalizations* for integrating “religiosity” within the academic study of religion (the box on the right). “RI” and “RE” are defined and explained in more detail below.



NOTE: Boxes with dotted lines indicate processes that are mostly implicit, while boxes with solid lines indicate processes that are mostly explicit

Figure 1: VISOR Conflict of Motives

We do not have other charts that provide a separate list of justification mechanisms used by scholars whose rationalizations press in the direction of *excluding* 'religiosity' from the academic sphere. This is because our focus is on whether or not (or the extent to which) scholars *accommodate or contest* a particular set of naturally evolved, religiously-salient *dispositions*.

Based on empirical findings and theoretical developments within the field of bio-cultural sciences that study religion, it can be argued that part of the phylogenetic and cultural heritage of contemporary humans are *evolved tendencies* that contribute to the emergence and persistence of "religiosity," such as the proclivity to *infer the presence* of contingently embodied or ontologically confused intentional forces when confronted by ambiguous phenomena and the proclivity to *give preferential treatment* to those with whom one regularly engages in ritual practices.

The sort of objectivity typically valued in academic contexts seems to require the contestation of the evolved dispositions identified above. Such contexts often foster a bias toward methodological naturalism and secularism, that is, resistance to appeals to

disembodied agents in scholarly explanations and appeals to supernatural authorities in proposals in the public sphere. Most scholars *explicitly* desire to pursue and maintain (or at least perceive themselves and be perceived by other scholars as pursuing and maintaining) scholarly ‘objectivity’ in the sense described above. However, we want to discover and measure the different ways in which individual scholars *implicitly* reason about this apparent conflict between the motives toward objectivity and religiosity.

For the sake of conceptual simplicity (and a feasible research design), we begin by describing those whose academic behavior is typically shaped by an implicit resolution of the conflict that *allows or promotes* the incorporation of beliefs (or attitudes, behaviors, etc.) engendered by religiously-salient cognitive and coalitional biases into scholarly activity within the academic sphere.

“*Religiosity Integrators*” (RIs) are people whose implicit motive to defend the deliverances of religiously-salient biases is stronger than the implicit motive to “objectivity.”

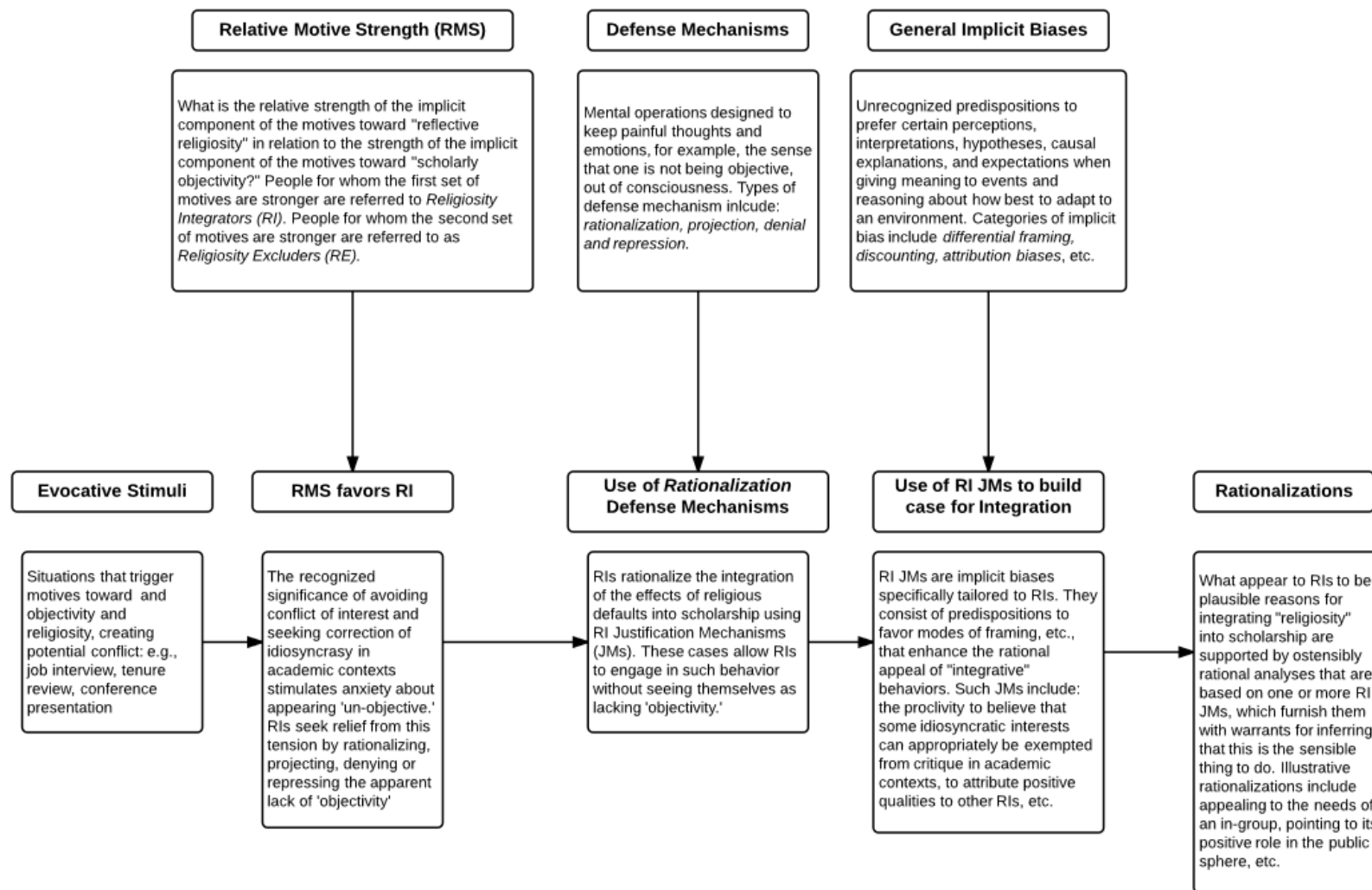
For a variety of reasons and in a variety of ways (personality factors, mentalizing and empathizing capacities, social experiences, philosophical reflection, etc.), some scholars have more strongly contested these religiously-salient dispositions. Their approaches to research, argumentation and even academic politics, are shaped by the (more or less explicit) acceptance of methodological naturalism and secularism.

“*Religiosity Excluders*” (REs) are people whose implicit motive to pursue and maintain objectivity is stronger than their implicit motive to defend the deliverances of religiously-salient biases.

The resolution of the apparent conflict in either direction (RI or RE) can be manifested in socially (academically) undesirable ways. REs may be perceived as reductionistic, closed-minded and elitist. RIs may be perceived as superstitious or engaging in special pleading. The rationalization of either kind of explicit behavior can be shaped in part by implicit biases in reasoning.

The “**VISOR Rationalization Process**” chart (see Figure 2) depicts the relationship among motives, biases and justification mechanisms implicit in the reasoning of scholars who explicitly defend (or engage in) behavior that integrates or elements (or outcomes) of religiosity into academic discourse or activities (Religious Integrators).

It is important to emphasize that REs are biased too. Although they have tried to contest (and/or have personality factors that make it easier for them to contest) the specific biases indicated in the construct “reflective religiosity,” they will have other biases that may lead them to misrepresent the attitudes or behaviors of RIs. It is also important to stress that biases are not necessarily problematic. The bias toward self-care, for example, enables us to survive. In this context, then, “bias” is not intended as a value judgment about participants but as a factor that contributes to participants’ judgments about value.



Note: The three boxes in the top row represent the latent variables or general constructs that inform the specific mental events in the lower boxes.

Figure 2. VISOR Rationalization Process

We do not have as much research to back us up in our analysis of the biases and behavior characteristics of REs. We hope to capture some of these dynamics in the “explicit” part of the survey, where we ask participants to indicate their academic values. Moreover, we

can find signs of RE biases by comparing them to those who resolve the conflict in the direction of RI behaviors. This current lack of data is a transitional problem; eventually, we will have more research to balance out the rationale for the RE side. At this stage, however, it makes sense to focus on the evolved dispositions that guide RIs (given the massive research in this area) and allow the reciprocal relation between them and REs to help us pick up some of the key biases and behaviors of the latter.

### 3. Methodology

**The methodological task** is to construct a questionnaire with “conditional reasoning problems” that can help us detect and measure the relative motive strength of these two tendencies in individual scholars. We hypothesize that RIs utilize a series of “justification mechanisms” to rationalize their behavior in a way that REs do not.

We can deal with the distinction between RE and RI in a structurally analogous way to the methodological strategy used by James and LeBreton (2012) to distinguish between the implicit reasoning of “aggressive” (AG) and “non-aggressive” (NA) individuals. They based their analysis on the extensive research on AG personalities, and defined NA personalities (in large part, but not exclusively) in opposition to their AG counterparts.

We are basing our analysis on the extensive research in the disciplines that make up the bio-cultural study of religion. There may be other factors contributing to the conscious rationalization outputs of REs (which we can include in the theoretical sections of articles and books reporting on VISOR), but for our purposes it suffices to note that their (more or less) implicit contestation of religiously-salient dispositions will nudge them toward inductive reasoning solutions that do *not* depend on justification mechanisms shaped by those dispositions. In other words, they are biased toward methodological naturalism and methodological secularism (see MSMN scale).

#### Step 1: Developing Justification Mechanisms (JMs)

The first step is to determine the JMs that shape the rationalizations of RIs. JMs are informed by implicit biases that surreptitiously shape, define, and guide perceptions, interpretations, hypotheses, causal explanations, and expectations that a person employs to give meanings to events and to reason about how best to behave in or adapt to an *environment* (James & Lebreton, 2012, p. 60).

The *environment* in which we are interested is “the academy,” construed as all of the various intertwined activities, procedures, institutions, etc., in which scholars who study religion are professionally involved.

RIs will use JMs to construct rationalizations that help them deal with the conflict without appearing to give up on “objectivity.” JMs are meant to enhance the logical plausibility, and thereby justifiability, of rationalizations for an RI reasoner’s motive-based dispositions that contribute to his or her *behavior*: defending the inclusion of appeals to supernatural agent coalitions within academic discourse about religion.

James and LeBreton recommend four sub-steps in the development or discovery of justification mechanisms associated with a new set of motives that one wants to research. I have adapted these to our interest in RIs (and indirectly, REs) in what follows.

*a. Sub-step 1: Understand Individual Differences*

For us this meant considering *individual differences* in the *behaviors* we believe to be induced by the apparent conflict between the motives/desires/tendencies toward “reflective religiosity” and “scholarly objectivity.” Consistent with the methodological strategy introduced above, the focus was primarily on the characteristics of RIs, and indirectly on REs.

*How are “religiosity integrators” likely to **behave**? And how is this different from “religiosity excluders?”*

- RIs are likely to value and defend their own and/or other’s incorporation of “religiosity” into academic contexts. We might hypothesize that conservative RIs may focus on defending their own religiosity, whereas liberal RIs may focus on the defending other’s right to integrate religiosity. Some RIs may also explicitly appeal to supernatural agents and authorities in their scholarly explanations and hypotheses, at least in some contexts and for some audiences. Minimally, they will not challenge such integration when it occurs.
- REs, on the other hand, will not make such appeals and will (more or less strongly) resist those who attempt to integrate religiosity into academic discourse or practice.

*What parts of the motive are likely to be **implicit** versus explicit?*

- RIs are obviously explicitly aware of their own role in serving a particular supernatural coalition (e.g., a church, temple, ashram, etc.), and of their appreciation of the texts and authorities of that coalition. However, they may not be aware of the extent to which their embeddedness in such contexts implicitly shapes their perception and reasoning about values. Research in the bio-cultural sciences of religion demonstrate, for example, that participation in rituals increases belief in supernatural causes, and being primed to think about supernatural agents who might be watching can trigger implicit in-group defense and out-group antagonism.
- REs who do not regularly participate in such rituals or reflect on the possible presence of morally relevant disembodied agents are less likely to be as significantly affected by these evolved biases.

*b. Sub-step 2: Understand Attempts to Enhance Rational Appeal*

In our case, this meant seeking to understand how RIs attempt to enhance the rational appeal of their “integrative” behaviors.

*What adjectives do RIs use to **frame** “religiosity integrating” behaviors?*

- RIs are likely to use adjectives like traditional, attentive, wise, sensitive, etc., in their discussion of such behaviors.
- REs, on the other hand, will tend to frame these behaviors as superstitious, naïve, subjective, etc.

*How do RIs characterize behaviors meant to **replace** “integrative” behaviors (i.e., behaviors that pursue “objectivity” without exempting “religiosity”)?*

- RIs will likely describe such behaviors as scientific, reductionist, close-minded, secular, or exclusive.
- REs, on the other hand, will tend to characterize such behaviors as scientific, scholarly, rigorous, etc.

*What theories of **causality** do RIs use to **justify** their behavior?*

- RIs are more likely to accept – or at least be open to – causal theories that appeal to supernatural agents. They will accept (or allow) the inclusion of authoritative references to supernatural text, narratives or religious authorities. This may be limited to theories that postulate an infinite person-like Force who is at least indirectly the cause of events in (and the existence of) the world. Moreover, they will be more likely to focus on the causal effect of finite religious social communities, especially their positive role in the world, for example, providing wisdom and insight not available elsewhere. RIs may also believe that the quality of religious reasoning will fall apart if it is not embedded within and sustained by a specialized discourse community of the sort provided by the religious traditions. For RIs, these sorts of causality justify the incorporation of “religiosity” into academic contexts.
- REs, on the other hand, will tend to limit causality to naturalistic forces. They will see rigorous methodological naturalism and secularism as justified because of the way in which they causally contribute to “objectivity” in academic contexts.

*What attributions do RIs make about the **intent** and/or **character** of other “RI” people?*

- When reflecting on people like themselves, RIs will be more likely to attribute to them qualities like passion, compassion, commitment, openness to the transcendent, and spiritual attentiveness.
- REs, on the other hand, will tend to make other attributions, like proselytizing, defensive, parochial or closed-minded.

*What are the probabilities of **success** (as defined by RIs) associated with “religiosity integrative” behaviors?*

- For RIs, such behaviors are likely to be successful if and when they fulfill the needs of the supernatural coalition. In some cases, success might be supported by the perceived will of a relevant supernatural agent. They might think that RI behaviors bring to the study of religion a sensitivity to the subject matter that will lead to better scholarship. If “secular” scholars can learn enough about their in-group, indwell its narrative and practices, they will be able to see how rich, fulfilling and illuminating they are. RIs may also define success in terms of the high reputational standing and rewards that they and others receive inside their own religious communities as a result of their RI behaviors. In other words, “success” may be measured not only in terms of the general values of the academy but also in terms of the particular values of a religious group.
- REs, on the other hand, will tend to downplay the probability of success for such behaviors. Rather, they will assume that these behaviors negatively affect scholarly objectivity and so are not likely to be successful.

### *c. Sub-step 3: Understand the Ways Evidence is Treated*

What **evidence** do RIs put forth to **support** their rationales and theories regarding “religiosity integrative” behaviors?

- RIs may appeal to supernatural revelation, religious experience or holy texts as evidence to support their rationales for their behavior. They might also point to the cooperative and altruistic behaviors of members of their coalition, to the significance of their religious tradition’s contribution to society, or to the peaceful, productive ecumenical collaboration of scholars from diverse religious traditions. RIs may also emphasize scientific research that shows correlations between religiosity and psychological or social well-being. Moreover, some RIs may even claim that they have more evidence than others because out-group members do not have epistemic access to the supernatural revelation or experience of their religious coalition.
- REs, on the other hand, do not find this evidence compelling, which they believe is inappropriate warrant for scholarly inferences. They will tend to have more confidence in evidence that can be evaluated by out-group members, and which does not appeal to supernatural authorities.

We looked for strong individual differences (between RIs and REs) in framing, causal theories, attributions, expectations and what is regarded as supporting evidence. We did this by summarizing the insights and distinctions gleaned from reflecting on the questions listed in the previous subsection. The stronger the differences in likely behavior the more plausible it is that RIs will select answers to conditional reasoning problems that are guided by the relevant JMs – and that REs will *not*.

### *d. Sub-step 4: Understand the Link between Implicit Biases and Justification Mechanisms*

Use the following nine implicit biases, we constructed new Justification Mechanisms (JMs) specific to “Religiosity Integrators,” which differentiate them (at least indirectly) from “Religiosity Excluders.”

- *differential framing*: meanings (adjectives) imputed to events, e.g., “opportunity” versus “threat”
- *attribution biases*: predilection to ascribe behavior to causal factors that implicitly justify expressions of motives
- *halo effect (or illusory correlation)*: tendency to associate behavior in one area with behavior in another area.
- *identification*: tendency to empathize with the plights, experiences, perceptions, emotions of specific types of persons.
- *indirect compensation*: increase logical appeal of replacing a threatening situation by imbuing compensatory situation with positive qualities.
- *discounting*: invoke assumptions, explanations or evidence that disputes critiques of one’s favored behaviors.
- *leveling*: discounting in which a culturally relevant but, for the reasoned, psychologically hazardous event is devalued by associating that event with a dysfunctional/aversive outcome.
- *positive (or negative) leniency*: unrecognized tendencies to overestimate (or underestimate) one’s proficiencies in a behavior domain.



- *rationalization*: use of ostensibly plausible reasons to justify behaviors that are unknowingly caused by unconscious, unacceptable and/or unwanted motives.

Additional implicit biases that might shape RI JMs, not mentioned in James and LeBreton, include:

- confirmation bias
- narrative immediacy bias
- deference to convention bias
- terror management; mortality salience increases detection and protection of supernatural agent coalitions
- cognitive depletion in rituals
- theological incorrectness
- supernatural detection activated by a sense of lack of control
- supernatural detection activated by priming of being watched
- availability (ease of cognitive access to familiar appeals)
- exposure effect (tendency to attribute truth to things repeatedly heard)
- social reputation bias (believe good things about oneself)

**Note:** the specific JMs constructed for motive-induced behavior “must be predicated on the types of implicit biases that pervade the framing and analyses that people use to defend manifestation of the motive” (James & LeBreton, 2012, p. 67).

#### *Possible Justification Mechanisms for Religiosity Integrators*

*Identification with Integrators Bias:* In pluralistic academic contexts, RIs will tend to empathize with the plights, experiences, perceptions, emotions of other scholars from different religious traditions who are trying to integrate their beliefs and are, for example, attacked by hostile REs.

*Religiosity Compensation Bias:* In response to the threatening situation of defending the integration of religiosity within a pluralistic academic context, RIs will tend to imbue other compensating situations involving being surrounded by other RIs with positive qualities (affirmation, support, ecumenism, etc.)

*Religiosity Exemption Bias:* RIs will tend to dispute critiques that they are engaged in special pleading by searching for reasons why it might be reasonable to exempt religious interests and idiosyncrasies from the drive toward “scholarly objectivity.”

*Religiosity Attribution Bias:* RIs will have a predilection to give credit to religiosity behaviors as causal factors in academic outcomes they deem positive. Attributing causality to factors like spiritual sensitivity, mystical devotion, etc., helps to implicitly justify

expressions of RI motives. They may also avoid attributing causality to RE behaviors, except when there is an academic outcome they deem negative.

*Religiosity Halo Effect:* When reasoning about other RI individuals who exhibit strong religiosity behaviors (e.g., spiritual, pastoral, etc.), RIs will tend to associate those positive behaviors with positive behaviors in other areas (e.g., intelligence, wisdom, scholarly objectivity, etc.).

*Religiosity Persecution Bias:* RIs will tend to frame their experiences in pluralistic academic contexts as examples of the unjust persecution of believers or “integrators.”

*Religiosity Leniency Bias:* RIs will tend to overestimate their (or other RIs’) capacity to behave “objectively” and contest their biases when engaging in activities in a pluralistic, academic context.

*Religiosity Leveling Bias:* RIs will tend to devalue events such as publicly engaging with REs in detailed discussion about the idiosyncratic interests of their in-group by associating such events with dysfunctional/aversive outcomes (such as the harming of the faith or morality of in-group members).

## Step 2: Construct Conditional Reasoning (CR) Problems

### *Principles for Construction*

The procedures for constructing CR problems are based on four principles:

- First, it is possible to design *logical assertions* that support or challenge the *implicit biases* that constitute a JM.
- Second, the presence or absence of a JM in a person’s implicit cognitive system *predisposes* him to *react* positively or negatively to these logical assertions (accepting or reflecting *logic* that is *based* on or projects the *implicit bias*).
- Third, people will believe that the soundness of reasoning contained in the logical assertions determined their judgment (they will be *unaware* of bias).
- Fourth, the *presence* (and strength) or absence of a JM in the implicit personality is *revealed* by the *judgments* a person makes of logical assertions that project (or challenge) those biases.

So, in our case, we needed to design logical assertions that support or challenge the implicit biases that constitute the JMs used by RIs, that is, persons who are predisposed to react positively (or negatively) to these assertions because they reflect logic based on those biases.

The presence (or absence) of the relevant JMs needed to be revealed by the *judgments* that people make about the assertions without their explicit awareness that the bias is shaping their assessment of the soundness of their own reasoning.

James and LeBreton suggest **three sub-steps** for the construction of CR problems: identification of situations with evocative stimuli,

the design of regular inductive reasoning tasks, and then the conversion of the latter into CR problems.

*a. Sub-step 1: Identify a stimulus for the motive toward “religiosity integration” behavior.*

Evocative stimuli that might motivate RIs toward the resolution of the conflict by allowing or promoting the deliverances of evolved religiously-salient dispositions within an academic environment include:

- Job interview at the AAR
- Reacting to an editor’s response to a journal submission
- Faculty development meeting
- Conceptualizing a research project
- Serving as a reviewer for a funding agency
- Presenting at a scholarly conference
- Responding to a book review
- Participating in a public debate
- Preparing for a promotion/tenure review
- Expert witness in a legal case involving religion
- Decision about student recruiting at a seminary
- Reaction to a statement of faith

*b. Sub-step 2: Design an inductive reasoning task*

Next one should follow the following sorts of strategies to design a *regular inductive* reasoning task, which is *not yet* a conditional reasoning problem:

- *inference*: discriminating among degrees of truth and falsity of conclusions (e.g., causal inferences) drawn from given premises (e.g., arguments, data, models, assumptions).
- *recognition of assumptions*: recognizing unstated assumptions in a given statement or logical assertion. A variation on this theme is to identify unstated assumptions that strengthen or weaken a logical assertion.
- *evaluation of evidence*: weighing evidence to decide if generalizations or (general) conclusions based on the given (specific) data or assumptions (premises) are warranted. This often involves determining which testimony is trustworthy, which evidence is untainted, and which samples are representative in regard to evaluating the reasonableness of a logical conclusion.
- *relevance of arguments*: distinguishing between arguments that are strong and relevant versus those that are weak and tangential or irrelevant to a particular issue.

- *covariation or causation*: determining whether covariation among events pertinent to a logical assertion is due to causal influences or is the product of spurious correlation.
- *unmeasured variables*: determining whether causal explanations (models, theories) offered to support a conclusion have omitted one or more key variables.
- *expectations of outcomes*: forecasting consequences, including dysfunctional ones, that might occur naturally or as the result of planned changes or proposed interventions.
- *analogies*: examining the similarities shared by two stimuli (people, situations, events) and inferring the likelihood that those stimuli share other attributes.
- *generalization of relationships*: using information about relationships among variables in a particular sample to draw inferences about those relationships in other samples (or in the larger population).

Each CR problem should consist of a stimulus (story, argument, analogy, etc.), followed by four answers, only two of which are meant to be tenable. None of the answers will follow necessarily (as with deductive logic), but the content of the stimulus will provide some support for two of the answers.

The problems must be constructed in a way that RIs will implicitly import assumptions into their reasoning in a way that will attract them to a particular answer. REs will be attracted to the other logically tenable answer both because they are not guided by the relevant JM, and because it will be formulated in a way that might especially induce them to choose it (e.g., utilizing terms attractive to them such as “naturalism” or “secularism”).

### *c. Sub-step 3: Develop conditional reasoning problems.*

The key here is to design the CR problems so that people with different dispositions/motives/practices related to the conflict between “objectivity” and “religiosity” (RIs and REs) will recognize *different unstated assumptions* as reasonable solutions to it (taking advantage of the logical ambiguity of inductive reasoning).

The presentation of each of the following CR problems is followed by an explanation of the methodological strategies and principles used in its construction and a discussion of the alternative *tenable* conclusions that are meant to attract RIs or REs.

The details of each scholarly scenario included in the SVS, and the rationales guiding their construction are in the “SVS info” section of the Excel spreadsheet included in the supplemental online materials.