Qualities Distinctive to Christian Researchers: A Quest for Spiritual Significance

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Significance is not only a distinction made in quantitative research, but it is one held by the Christian scholar doing quantitative research as well. Yet for the Christian scholar, the significance level is both statistically and spiritually informed. Three distinctive qualities of the Christian quantitative researcher contribute to the discussion of practical and meaningful significance in research. The three qualities include: a supernatural calling on the researcher's life; engagement with God on what to research, the research, and how to further research; and the worldview based upon Biblical principles.

Williams and Monge (2001) defined statistical significance as the "level of calculated probability" being "sufficiently low as to serve as grounds for rejection of the null hypothesis" (p.67). Alongside this description is one for a rejection region, significance level, which is set by the researcher as "grounds for rejection of the null hypothesis" (p.67). Significance is not only a distinction made in quantitative research, but it is one held by the Christian scholar doing quantitative research as well. Yet for the Christian scholar, the significance level is both statistically and spiritually informed.

Statistical Significance

One of the most common measures within quantitative research is that of statistical significance, the p value, being less than a value of 0.05 (Williams & Monge, 2001). Sawyer and Peter (1983) defined the results of statistical significance "which occurs rarely if the null hypothesis is true" (p.122). Kühberger, Fritz, Lermer, and Scherndl (2015) clarified the misconceptions of statistical significance meaning "big and important" and non-significance meaning "'no effect at all'" (p.1). Researchers question the magnitude of the effect size in reporting statistical significance due to the influence of the sample size (Kühberger et al., 2015). Peeters (2016) addressed the fallacy in assuming that statistical significance is the final word within quantitative research. According to Peeters (2016) practical significance advanced beyond statistical significance by aligning the results with practical application, thus "substantive

significance" (p.83). There are alternative means Peeters (2016) recommended such as "general interpretation guidelines," "benchmarking," and minimal important difference" (p.84). Gross (2015) challenged the traditional dialogue centered on statistical significance and invites researchers to dive deeper into interpreting meaningful results versus hiding behind sampling errors.

While statistical significance is a valid means of measurement in quantitative research, researchers (Sawyer & Peter, 1983; Kühberger et al., 2015; Peeters, 2016; & Gross, 2015) imply that there is more to the determination of what is big and important in the conversation on significance in research. The Christian researcher should be allowed to speak into the conversation on significance beyond informing statistical data in research. The Biblical foundation is the starting point for understanding significance spiritually and defining distinctive qualities of a Christian quantitative researcher.

Biblical Account of Significance

Genesis 18 begins with the story of Abraham and Sarah entertaining three visitors in their tent. While the identities of the visitors are never explicitly revealed, their prophetic and divine natures are implied. The nature of God unfolds in the chapter's beginning passage as Sarah contends with what appears to be statistically improbable ~~impossible~~ – pregnancy in her nineties. Not bound by probabilities or differences, God asks Sarah, "Is anything too hard for the Lord?" (Genesis 18:14a, New International Version). Where statistics limit man, it does not limit God. This truth informs the Biblical perspective of significance in the account that follows Abraham's encounter with the three visitors.

When the three visitors to Abraham's camp arose to leave, they turned their attention toward Sodom. Doyle (2004) described the inhospitable and shaming culture of Sodom that had demoralizing sexual expression. The Lord considered not telling Abraham that He was about to destroy Sodom (Genesis 18:17). The Lord knew that Abraham was an influential piece of His plan to bless His people. It was important to the Lord that Abraham had the right understanding of God, the right encounter with His justice. Would Abraham stand by a justice that could cost Him his family? One of the biggest tests for the Christian quantitative researcher is what they will do when faced with statistical results that challenge their beliefs. Abraham was challenged in his belief of God, yet still trusted that God has the authority and perspective that goes beyond his finite understanding.

God further explains to Abraham that He will go down to Sodom and Gomorrah and judge for Himself their sinful state. Abraham then boldly begins to enter into a dialogue with God. Abraham is not carrying a casual conversation with the Lord, but is actually questioning God's decision to usher in justice, even at the cost of godly people. The justice wager begins with offering 50 godly people as a significant number to save the

two cities. Abraham is trying to redefine the rejection region. In Genesis 18:25, Abraham crosses his culture's honoring boundaries via passionate and manipulative questioning. Genesis 18 reveals a side of Abraham and God's relationship that wasn't revealed to the reader prior to the text. Abraham has a lot to say to God. Genesis 18 ushers in statements and questions that challenge God. The essence of Abraham's dialogue sound like, "Don't act like this God!" "Don't treat godly and wicked people the same." "Aren't you going to do what is right?" Abraham appears to feel a need to remind God about His character and His righteous nature. God concedes to save Sodom and Gomorrah if there are 50 godly people within its territory.

Yet, Abraham knew about Sodom and Gomorrah, his nephew Lot chose to live in Sodom Gomorrah's land. The land that Lot chose was lush and fertile, full of what appeared to be opportunity. What is the best opportunity in the natural world is not always the best opportunity in the spiritual world? Setting the rejection region at 50 people would not be enough to save Sodom and Gomorrah. Just like Abraham undertook the task of speaking to the Lord about His rejection region, there is a weight of responsibility in setting the appropriate rejection region in order to determine what is statistically significant. Abraham moves the rejection region to 45, and God agrees. Again Abraham moves the region to 40, and God commits to keeping the region at 40. Next Abraham argues for 30 people to represent the rejection region and again God agrees, followed by a further decrease to 20 people and finally 10. The rejection region was set at 10 people. It appears that spiritual significance is directly connected to relational significance between God and His people.

Williams and Monge (2001) described the most common statistical significance rejection region being $p < 0.05$. Generally speaking that means that 95 times out of a hundred, a researcher should get the results presented in the research. [Using this same level of significance…] for 10 people to be considered a statistically significant number, there needed to be at least 200 people living in Sodom and Gomorrah. Abraham's negotiations starting at 50 people for a rejection region suggests a greater number, of which, 200 is conceivable. Yet, 0.05 is not a Biblical significance level; man's statistical rejection regions do not limit God.

 Was the number of people that Abraham negotiated with God for statistically significant? With no solid proof of the population of Sodom and Gomorrah at the time, the significance value is merely a speculation. Except, the rest of the story shows God saving Lot's family, including his wife and two daughters. In the end because of Lot's wife's disobedience, only 3 people were saved. Three people constituted statistical significance that day.

The stories of spiritual significance are not limited to Abraham's encounter with God in regards to Sodom and Gomorrah. In Genesis 7, God was preparing to flood the entire Earth. Eight people constituted statistical significance in saving Noah, his wife, his sons

and their wives. In Matthew 18:12, God finds 1 out of 99 sheep statistically significant enough to leave the 99 in order to find the 1 lost sheep. In fact, Matthew 18 describes how heaven celebrates the spiritual significance of the shepherd leaving the 99 sheep.

Like Peeters (2016) argued for practical significance, there must be other distinctions including guidelines and benchmarks that aid in meaningful and applicable conversations based on quantitative research. For the Christian scholar there are distinctions that contribute to a meaningful spiritual significance factor. The guidelines and benchmarks for the Christian scholar should be based in Biblical understanding. Along with a Biblical foundation, a Christian scholar should also be informed through an active and daily relationship with God.

Christian Quantitative Researcher Distinctions

On the basis of understanding spiritual significance ranging according to a God-ordained value, the Christian quantitative researcher should display characteristics that make them distinct from other scholars. Without distinct elements, the Christian researcher is just a scholar like every other researcher. Calling, engagement, and worldview are three distinctions that transcend a Christian quantitative researcher from other researchers.

Calling

"Declaring the end from the beginning, and from ancient times things which have not been done, saying, 'My purpose will be established, And I will accomplish all My good pleasure'" (Isaiah 46:10, New American Standard Version). Williams and Monge (2001) discussed the value in conducting quantitative research and the hypothesis tests utilized. Starting with a hypothesis is a common beginning point for most quantitative researchers (Creswell, 2014). The hypothesis is a researcher's attempt to understanding the "why" behind the study. As humans, we like to understand "why." For the Christian quantitative researcher there is a deeper underlying "why" in both what they are called to research and the deeper meaning behind that research. Romans 8:30 confirms, "those whom He predestined He also called, and those whom He called He also justified, and those whom He justified He also glorified" (English Standard Version). Being a Christian scholar is not vocation it is a calling.

The Christian quantitative researcher should believe they are called by God to do a specific work in order to accomplish a specific purpose. There are many purposes for researchers to do quantitative work, of which Williams and Monge (2001) boldly discerned that "just because a study has used statistics is no guarantee of its worth" (p.3). When a researcher is not motivated, driven, and reinforced by their calling, then all the pressure is upon them to prove the value and worth of the research. The Christian quantitative researcher is called to do good research; it is up to God what He

wants to do with the work from there. The calling of the Christian researcher should not be limited to the beginning of the quantitative research, but also to the deeper sub territories the researcher is called to further explore. Calling also applies to the future research that the Christian researcher would commit their work and vocation towards.

Engagement

Hatlem (2014) discussed that Abraham's invitation to reason with God ushers in an invitation for us to reason with God as well. Another distinctive quality of the Christian quantitative researcher should be the engagement of the researcher with God, the omnipotent and omniscient creator of the universe. The Christian quantitative researcher is not alone in their research work. Like Abraham was allowed by God to dialogue with Him, the Christian researcher is set up for engagement. This engagement is a critical component to the Christian researcher as they join the researchers before them in a communal journey of uncovering truth. Colossians 1:3 connects God as the Father of Jesus Christ who promises that knowing the truth would lead to freedom (John 8:31[,32]). Most research ends with where the current research studied could be further developed and researched in order to carry the baton of knowledge and understanding. There is a beauty in sharing in a dialogue of uncovering truth with other researchers, yet the bar is raised when God intentionally makes Himself available to be a part of the discussion. By the will of God, Jesus left heaven in order to engage with us, to be "Immanuel," "God with us" (Matthew 1:23). God's invitation in Matthew 7:7 is that His people are permissioned to ask, seek, and knock in order to receive what they are lacking or what they need. Abraham's bold questions in dialogue with God reveals that He is not afraid of our questions (Genesis 18:24-25; 28-32).

Engagement is not only available to the Christian researcher after the research is completed, but before and during ~~and after~~ the research. Again, Isaiah 46:10, reminds the Christian researcher that God works under a scientific method as well. Stating a hypothesis is just like God working from the end to the beginning (Isaiah 46:10). Our hypothesis can be a form of entering into an engagement with God about the possibilities within research. Overall, engagement should set the Christian quantitative researcher apart from other researchers in having a resource that is not available from a library.

Worldview

In documenting the Biblical basis of significance, a distinct quality of a Christian quantitative researcher arises, one of worldview. A Christian quantitative researcher should not base their works' significance in what the world values, but in a value system outside of this world. In John 17:16 Jesus reminded His people that "They are not of the world, even as I am not of it" (NIV). The Christian quantitative researcher is a citizen of the kingdom of Heaven called to usher in the kingdom of Heaven's

worldview on Earth (Matthew 6:10). "He is before all things, and in Him all things hold together" (Colossians 1:17, NIV). Abraham was challenged in his worldview when God appeared to be an unjust God. God knew this would challenge Abraham's worldview, but trusted that stretching his worldview was worth it.

God, the Creator of the universe, should inform the worldview of the Christian quantitative researcher (Genesis 1). From a God-informed worldview, the Christian scholar should seek the Bible as accountability to their findings. Solomon informed the Christian believer that "what has been will be again, what has been done will be done again; there is nothing new under the sun" (Ecclesiastes 1:9, NIV). Therefore, what is discovered in research was already known and God chose to allow it to be revealed. A Biblical worldview establishes the truth that we are all connected together by being created by the same source (Genesis 2).

Conclusion

The discussion of significance in quantitative research is valid and current to today's scholarly research. Significance limited to only the measurement of the p value is no longer enough (Peeters, 2016). Three distinctive qualities of the Christian quantitative researcher contribute to the discussion of practical and meaningful significance in research. The three qualities include: a supernatural calling on the researcher's life; engagement with God on what to research, the research, and how to further research; and the worldview based upon Biblical principles. Significance has multiple contributions to the practical application of research. Spiritual significance is a weighty contributor to the field of quantitative research.

The caveat for the quantitative researcher to benefit from the distinctions of a Christian researcher is based upon if the researcher actually has a relationship with God. Just claiming to be a Christian does not make a researcher distinct, it is the active relational interaction that differentiates the Christian quantitative researcher. Further research in studying the distinctive qualities of the Christian quantitative researcher lies in proving God as the originator and developer of the scientific method. The format of hypothesis, variables, testing, and results could be paralleled with Biblical accounts. Overall, the field of quantitative research would benefit greatly by understanding what motivation, engagement, and worldview is informing the scholarly work that is a part of uncovering truth.

About the Author
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