This is Your Brain on Faith

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**Abstract**

Faith is an integral part of everyone’s life, regardless of race, creed, religion, or lack thereof. This research will be exploring the relationship between individual’s styles of learning and different types of intelligences and their affiliation with faith. The research will show a connection between the way society, environment, genetics and upbringing affect our brain, learning, and cognition. Ultimately, these variables determine our relationship with faith. The purpose of this research is to allow people to recognize their learning style and cognitive habits, and acknowledge that their specific type of brain coordinates with their faith, along with reveling the process by which our faith develops. This is important information because it has direct inferences on one’s faith. The implications this paper has are, that it could answer questions that people have with the way they learn and conclusively the way their faith has developed. It could provide reason and understanding as to why your faith is the way it is and how it got there.

**Introduction**

Faith, a term often hard to describe. An abstract concept that affects many aspects of our lives with us even knowing it. An individual’s faith is deeply personal, making it as complicated and unique as the individuals themselves. As humans we are molded by our surroundings, environment, upbringing and culture, and the same goes for our faith. Our faith is constantly developing with our personality and changes as we progress throughout life. Our environments we were raised in alter our brain and change our mental processes. To go through the different environments and changes would be impossible because of the uniqueness of everyone’s brains and circumstances, so we focus on the predictable norms that most people go through. Indirectly our circumstances mold our faith, since our faith is based off of our mental processes, which are again shaped by an infinite amount of variables given to us throughout life. Our faith is based off of all of these different aspects, but are there any predictable outcomes based off of categorized types of brains and developments? This research aims to understand our faith more fully and concretely through understanding how it developed and how our cognitive dispositions, based off our environmental stimuli, affect out interpretation of faith.

**Cultural Neuroscience**

 The field of cultural neuroscience is a relatively new field of science. Cultural neuroscience,” investigates the interrelations among culture, mind and the brain” (Kitayama and Park, 2010, p.111). This could have many implications for our concept of faith. According to Ambady (2011), a social psychologist, “culture impacts the way in which the brain is wired and activated”. If our brain is so deeply influenced by our culture and surroundings, then our faith must too be subject to this same environmental stimulus. There is a direct cycle at work, starting with out environment, affecting our brains and the way we learn, to our faith. Although this field is relatively new, research in cognitive and neuroscience has shown, “substantial degree by which connectivities and functions of different areas of the brain change as a result of experience in general and of repeated engagement in some specific cultural practices in particular” (Kitiyama and Park, 2010, p.113). This research raises particular flags in the area of faith. Is our faith simply subject to the stimuli our brain is exposed too? Are we unable to determine how our faith is developed? To an extent our faith is determined by outside factors, particularly the way the outside world affects our brains, which is mostly unpredictable and uncontrollable, but there are a couple things that we can predict about our faith. We know generally how our faith develops according to James Fowler (1981) and the stages of faith, and we can draw conclusions about our faith using Howard Gardner’s (2006), multiple intelligences. Using these tools we can inquire how our faith got to where it is and how the different types of brains we have affect our faith.

**Stages of Faith**

 In order to better understand one’s faith we need to understand our different stages and steps that we took that got us to where our faith is today. These step are guideline that provide an understanding of the different stages of faith, of course there are exceptions but Fowler’s theory provides us with a look at human life with faith and how it develops throughout our various development and progress. The exploration of these different stages is important to this research because it provides a basis for predicting normal stages for where an average person should be, pertaining to faith development. Using this information we are able to compare it to our own faith in order to gain a better understanding of where we are and how far our faith has developed. This information shows us how we attained our faith using predictable social experiences, such as normal childhood occurrences and development. This will provide a basis for faith development and will allow us to examine how our unique, individual learning brains correspond to our response (or lack thereof) to faith.

**Stage 0: Infancy**

This stage is also called he infancy or undifferentiated faith stage. This stage spans from birth to around the age of 2 years old. This stage is characterized by reliance and trust of a safe and comfortable environment. For example the idea of a nurturing mother, there to take care of us as infants when we cannot take care of ourselves just yet. This stage develops in the infant, an idea of a higher power there to take care of us. We develop a basic system of trust in which we experience reciprocated love from a provider. For these reasons, researchers such as Justin Barrett (2012) believe that we have a natural “belief in a purposeful and designed world, an intelligent designer behind the design, an assumption that the intentional designer is superpowerful, superknowing, superperceiving, and immortal” (pg. 9). On the converse, if we are neglected as an infant and the caring is deficient from the primary provider, then we may develop similar feelings toward a higher power or lose belief in one all together. Stage 0 is very important in laying a foundation for faith and moving on to our next stage in life.

**Stage 1: Intuitive- Projective Faith**

This stage takes place from the ages of 2 to 7. It is characterized by fantasy filled dreams and imagination. Characters such as Santa, Easter Bunny and the Tooth Fairy fill the minds of young ones at this age because they have logical reason to not yet believe. The child’s faith is developed and shaped by the culture around them, focusing around stories, imagination and experiences that appeal to their newfound creativity. Their faith is strengthened by socialization and their surrounding culture. Ratcliff, (2004) states, ”spiritual development occurs through the dialectical process of socialization and acquisition” (pg. 110). A major danger at this stage is that children become enveloped in this imagination and they become scared and possessed by destructive images that their imagination conjures up. Stage 1 reinforces our established foundation from stage 0 positively or negatively.

**Stage 2: Mythic-Literal Faith**

This stage occurs in school-aged children, though none of these stages are limited to other ages and areas of life. This stage is a swing in the opposite direction from stage 2. What were taken creatively and imaginatively are now taken literal, one way or another and nothing in between. Symbols are not understood, stories are taken factually and the universe needs to be just. This stage can be symbolized with one common academic phrase, “but that’s not fair!!” The reinforcement to faith during this stage is in, “ finding and giving coherence to experience” (Fowler, 1981, pg. 149). The major limitation to faith in this stage is an over reliance on justice and literalness, and when the world doesn’t work that way, (which it rarely does) the child turns away from principles. This clash between imagination and literal brings us to our third faith stage.

**Stage 3: Synthetic-Conventional Faith**

This stage is around the time of adolescence. Characterized by a development of self-identity, realization of self worth and responsibility beyond family. Children begin to realize the many different things they now have to balance, all while trying to fit into social norms and cultural consistencies. Faith is developed at this time by a process of realization of self-worth and identity. One’s faith must evolve in order to account for this development and realization of things much greater then oneself. At the same time deficiencies arise in the shape of peer pressure and conforming to norms that no longer align with one’s faith or a realization that they never will line up, resulting in a nihilistic approach towards life and faith.

**Stage 4: Individuate-Reflective Faith**

This stage takes place during young adulthood. This stage is defined by struggle and a tussle for finding what a person believes and feels. People during this stage are searching for purpose and reason in a life, becoming more and more difficult to juggle responsibility. The strengths this stage has towards one’s faith pertains to the individual’s capacity to reflect on oneself and understand other’s perspectives, employing understanding to their faith and applying it to life. The major harm to one’s faith is a continual struggle with self-meaning and self-worth, devouring reason and motivation to continue searching and continuing in believing. Faith is ruined through lack of hope in finding purpose in the world. This stage sets the foreground for development of a new definition of truth and worth found in stage 5.

**Stage 5: Conjunctive Faith**

 This stage takes place during adulthood or more commonly described as the “mid-life crisis”. This stage is defined by trying to solve the conflicts in the previous stage with a complex, multi-faceted truth, of the never-ending search for answers and transcendence. The strength of this stage, pertaining to faith, comes from the ability to recognize; no matter the power one has they are still insignificant in the scheme of things. This moves faith into a centralized light that offers meaning beyond life. The major issue that results from this is the realization of insignificance and inactivity to resolve or become more. Individuals give up and abandon morals, values and of course, faiths. This stage leads then to a realization stage; stage 6.

**Stage 6: Universalizing Faith**

Stage 6, is entered when and only when the individual makes it out of stage 5. Individuals can get stuck in stage 5 if they embrace the inactivity that the paradox has left them with. Stage 6 is a stage of enlightenment, near a time towards the end of an individual’s life, the person begins to accept mortality and strives to transcend death by living morally and just for the rest of their lives. This obviously plays nicely into the idea of transcending death through religion. Religion offers an obvious opportunity to live after death and this explains why many older individuals become more active in religious institutions than that of younger generations. On the contrary, if the individual is unable to find purpose, or a moral compass in which to guide their path to fulfill a vision of self-completeness, they will reject the idea of transcendence completely and turn away from their faith entirely.

**Importance**

 Understanding these stages of faith development is important because we better appreciate all of the different variables that go into determining our faith. Every stage has a fork in the road that either leads us to improving our faith, based off of nourishment and meaningful reflection or hurting our faith through neglect and inattention to our basic needs. The outside world and forces that are simply out of our hands directly affect all of these major stages of faith. These stages are the norms by which most people experience faith development and they provide a standard by which we can examine our own faith and spiritual development. Now that we have our norm established we can look more specifically into the types of brains we have and how that affects our faith development.

**Multiple Intelligences**

 Gardner (1991) states, “We are all able to know the world through language, logical-mathematical analysis, spatial representation, musical thinking, the use of the body to solve problems or to make things, an understanding of other individuals, and an understanding of ourselves. Where individuals differ is in the strength of these intelligences - the so-called profile of intelligences -and in the ways in which such intelligences are invoked and combined to carry out different tasks, solve diverse problems, and progress in various domains" (pg. 12). Gardner proposes that our brains are geared towards thinking a particular way. How we came to have this specifically geared brain involves any number or stimuli and inducements from the outside world. So, our focus is not on how we came to get these intelligences but more so how these intelligences affect our faith. Gardner originally proposed the idea of 7 multiple intelligences, more recently people have tried to suggest other intelligences but these 7 well encompass the full spectrum of the normal individual. The 7 intelligences are musical, bodily-kinesthetic, logical-mathematical, linguistic, visual-spatial, interpersonal and intrapersonal. These different intelligences are always working together everyday, but most people normally have an affinity to one or two specific intelligences. Regardless or why we have this affinity, how does this way of thinking and learning affect our faith?

**Musical**

 This intelligence is one of the first to be seen in children. We all know those individuals who have “an ear” for music. They pick it up much quicker; they are able to listen more closely and in some cases able to repeat the same rhythm and harmony. The individuals with this intelligence are sensitive to rhythm, pitch, and sound. They’re able to recognize patterns in things they hear and interpret meaning from songs and noise. People with this musical disposition are able to bypass linguistic roadblocks because of the universality of musical language. Finally these people have an obvious outlet for stress and anxiety that they may encounter. Faith can be strengthened with this intelligence by being able to find purpose in the small things in life, and patterns that are being presented. More importantly these individuals are able to express themselves and better reflect on questions in life. One area from this intelligence that may hinder faith is if the individual gets stuck on the pattern and rhythms they experience in life and attribute it to their faith. Gardner, (2004), hints at the idea that the musical intelligent person may be unable to communicate linguistically because their communication area of the brain is overridden with musical ideas, leading them to the inability to properly communicate emotion and feeling. We see this commonly in the “tortured artist (pg. 120)”

**Bodily-Kinesthetic**

This type of intelligence is centered on the idea of bodily movements. A good example of a kinesthetic person would be a dancer or a surgeon. These individuals have a strong sense of body awareness and coordination. They enjoy movement, touching, hands on practicum and learn by doing. This intelligence reinforces faith by emphasizing a hands-on approach. Service to others reinforces one’s faith and offers a sense of purpose to the individual. The downfall of this intelligence would be that they struggle with the abstract. This individual has a hard time with intangibles. They need to see, to feel and play with to believe. This clearly presents issues with the idea of faith in a higher power.

**Logical-Mathematical**

 The logical-mathematical brain is an intelligence in which the individual is able to understand long strands of reasoning, and rapidly problem solve. They are able to think conceptually and abstractly, while investigating patterns and designs that are apparent to them. This individual like solving problems, deciphering puzzles, finding solutions and answering cosmic questions. A very thin line separates the logical brain and faith. This intelligence flourishes when it comes to questions of faith and other abstract concepts. Continually seeking an answer and always asking questions. This reinforces one’s faith and may provide answers. The failure in this mindset, when it comes to faith is that many of these questions may not have answers just yet, leading the individual on a wild goose chase and ultimately burning out the individual, exploiting their faith and tiring their belief. It is very common, in the arguments of faith, to see mathematicians “proving” that they have solved the problem of faith, one way or another. The reason for this is because they are able to logically process and problem solve from point A to point Z, and deduce answers that maybe hidden to others.

**Linguistic**

The linguistic brain specializes in the use of words. These individual’s have specially developed auditory skills and often think with their words. This type of brain enjoys reading, poetry, writing, and word skill games. This intelligence is not just that of a good speaker but also of a good listener and probably most important, adept to comprehension. Communication is essential for these types of intelligences to excel. The strength that this type of intelligence portrays when it comes to faith is that of constant communication with a higher power, or even with oneself. This communication is key when reflecting on ones values and attributes of their personalized faith. The problem that may arise in this particular area would be that people with this intelligence need feedback and auditory feedback is usually the type in which they are looking for. This presents issues with faith because responses are not distinctly auditory. Responses come in a variety of ways, and this may cause frustration for the linguistic learner.

**Visual-Spatial**

This type of intelligence thinks in space. They are able to visualize and represent what they see accurately. A sculptor or artist might have some of these traits as well as a mathematician, who needs to abstractly rotate and flip shapes in space. These individuals like to draw, visualize and imagine, they notice intricacies in the physical and can appreciate the details in works. Gardner (2004) uses an interesting example of spatial intelligence found in Eskimos. These Eskimos exhibit unique abilities, such as reading words that are backwards or upside down, and a resounding sense of direction. They say this spatial awareness is attributed to years of having no environmental cues of direction due to the harsh habitat that they live in (pg. 200). This is an example of how our environments mold our brains and how we can pass these intelligences onto future generations. These changes in our mental processes directly affect our faith. In this case individual’s faiths can benefit from this intelligence by “ a continuing or perhaps even an embraced capacity to appreciate the whole” (Gardner, 2004, pg. 204). People with this spatial intelligence can also be described as naturalists and have a good sense of not only where they are physically but also spiritual, they have a connectedness to things around them and that translates strongly to their faith. The paradox to this intelligence is that individuals with this capacity experience a falling off in performance, losing their sense of place and awareness. This loss of awareness could greatly affect one’s faith and contribute to a feeling of being lost after a long period of knowing where one is.

**Interpersonal**

 This is one of the more unique intelligences. This brain is wired towards understanding others and interacting with people around them. These individuals learn through interaction with others. The characteristics of this skill are highlighted by empathy and social skills. They learn through dialogue, group work, collaborative learning and inspiration from others. These individuals tend to seek harmony with others and understand others emotions well. In order for this individual to flourish they need to be in a social environment, constantly exercising their brain and recognition of others emotions. Interpersonal individuals are constantly enveloped with understanding intentions, motivations and desires. This could greatly benefit ones faith because of the need to better understand the entities around them, including entities of higher power. One’s faith would flourish in the attempt to better understand the intentions and meaning behind the world and the faith in it. An area of caution pertaining to this intelligence would be an ignorance to the self’s need. Faith, being a deeply personal topic, needs to be examined thoroughly by the individual and understood carefully, a danger would be a neglect of what the self needs when answering questions about faith.

**Intrapersonal**

Intrapersonal intelligent individuals have the special ability of understanding one’s own needs. They understand themselves, including their doubts, moods, and impulses. This intelligence is used in our lives to regulate and motivate us into accomplishing feats. Intrapersonal people have a clear understanding of their goals; they know where they are and where they want to be. They have strong inner motivation, confidence and opinions. Theses types of people do well with reflections, diaries and introspective exercises. One reason this intelligence bodes well with faith, is because of the desire to fulfill one’s goals. This type of brain knows what it wants and is highly motivated to achieve it. Strength of faith requires direction, motivation and confidence or values. The reward is tangible to these individuals and they know what to do and how to achieve their goals. The danger here is becoming too wrapped up in the self’s desires and pride. Pride and desire lead an individual away from their faith, regardless of religion or belief.

**Importance**

These multiple intelligences give us a look inside the minds of all individuals. People are not limited to these intelligences, nor are they limited to a specific set of them, but they provide us with a unique way to look at how our brains and environments affect our faith. Science, genetics and sociological understanding explain in some way in which we receive these unique brain, as well as mental processes. But it is still impossible to locate each variable and stimuli that molds our brain, so instead of focusing on the reason, we focus on the result. From Gardner’s multiple intelligences we are able to extrapolate information about our faith and how our mental processes affect our spiritual development. Each intelligence offers something to our faith, and at the same time sets a stumbling block in front of us. These intelligences offer us a unique perspective into our own faith and allow us to recognize our shortcomings and our strengths.

**Conclusion**

 When examining faith there are many immeasurable and unquantifiable results. It is difficult to measure the amount of one’s faith, let alone attribute it to a specific set of factors. There are obviously some factors that we are aware of such as upbringing and culture but the specifics are hard to pinpoint. The details we do know show themselves in models such as Fowler’s stages of faith. This model provides us with an outline of a normal, average person and the path they follow as they grow up, pertaining to faith. There are exceptions and there are reasons to disagree but it provides us with a baseline and a comparison to our own lives and our own faith. Gardner’s, model of multiple intelligences enabled us to examine our minds and see how our brains affect our faith. We established that our cultures affect our brains, then we moved onto how our environment influences our faith development and the stages we are in, and finally we took a look into our own minds to examine our own personal relationships between our brain and faith. All of these connections lead to some very interesting implications and questions that we should be asking as a society. If our brains are somewhat determined and wired by our culture, environmental stimuli, and genetics, and our faith, or lack of, is rationalized and processed by our brain. Does that mean our faith is dependent upon our surroundings? Is our faith determined by outside forces? The implications for this kind of rationale are dangerous and directly contrary to many interpretations of faith and religion, but they bring up some important questions, that we need to examine. If our faith is determined by forces outside of our understanding and control, does that hold us responsible for the consequences that a lack of faith may come with? For example, all of Fowler’s stages of faith have a positive route and a negative route. One that builds our faith and another that burdens it. If a child is neglected at birth and not given enough love and safety, according to Fowler, their faith will be neglected also. If that child continues to grow up and continues to be neglected in each stage, then consequently their faith will be hindered, until eventually they abandon faith in any positive manner. Can we blame the kid for turning out this way? According to Fowler these forces were out of his hands and he had no control in the way he and his faith developed. These are interesting questions and pose many difficulties when looking specifically at the idea of heaven and hell. Are we responsible for the way we turned out and developed? Do we have a say in determining our faith? Our faith is a very delicate concept, with powerful implications. This research allowed us to examine this abstract notion and compare it to our own lives, through that of spiritual development throughout life and mental development’s affect on faith.

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