

The Science and Sources Behind Amavitae

Background

Today's employment and education marketplace fails to prepare people for available jobs and to connect them to jobs they are likely to succeed in. We believe this disconnect is a major contributor to the skills and opportunity gaps. We also believe the solution lies in providing the emerging workforce with fun, engaging and relevant information about careers they'll thrive in and how to get there.

The skills gap is a serious problem. There are currently more than 5 million open jobs in the United States¹ and not enough people with the right skills to fill them. Another major issue facing individuals, communities and the economy as a whole is the opportunity gap.² Socio-economic factors play a huge role in a kid's opportunities to get a quality education and succeed in life.

These are complex problems and we don't pretend that Amavitae alone will solve them. However, we do believe that a free, easily accessible tool that provides democratic access to the information young people need is an important contribution.

Our work is informed by and draws on a significant amount of third-party research and data. This document points to some of the work that has informed our approach. It also provides a summary of data sources for facts and figures that appear in the Amavitae app.

Discover What You Love

When we talk about loving what you do, we're referring to finding a career that interests a person and involves activities a person might enjoy. This doesn't necessarily mean becoming a professional athlete or a rock star (although we encourage you to try if that's what you love!). For many people, more than one occupation fits the bill. Amavitae is focused on helping people to understand how their interests line up to specific occupations -- particularly those that are high-growth or in new and emerging fields. In other words, jobs that will be around in the future.

Of course work environment plays an important role in job satisfaction as well. Future iterations of Amavitae are expected to integrate workplace cultural fit into our models.

¹ <http://www.bls.gov/news.release/jolts.nr0.htm>

² Check out [Closing the Opportunity Gap](#) to learn about this critical issue facing society today.

The Benefit to Employers

The concept of finding work that's right for you should be as important to employers as it is to individuals. Job satisfaction and being good at what you do is linked to a variety of critical business outcomes. For example:

Productivity: One study found that happy employees are about 12% more productive.³ As far as measurements of productivity go, 12% is a massive increase - it's the equivalent of getting an extra hour of work done every day.

Retention: It probably won't come as a surprise to hiring managers that research demonstrates a strong connection between job satisfaction and retention.⁴

Filling the pipeline: An alarming share of students (more than half) say they know nothing about careers that pay well or academic disciplines with lots of jobs available.⁵ The best way to close that gap – and encourage students toward careers that are growing – is to deliver the information they need to make good decisions.

The Assessment

So where does the Amavita assessment come from? In 1959, Professor John Holland introduced "A Theory of Vocational Choice."⁶ Holland Theory defined 6 characteristics associated with our work interests (commonly referred to as RIASEC):

- R – Realistic (hands-on)
- I – Investigative (scientific)
- A – Artistic (creative)
- S – Social (empathetic)
- E – Enterprising (entrepreneurial)
- C – Conventional (methodical, accurate)

Most people are a combination of all of these characteristics to varying degrees. Assessments that rely on RIASEC typically link a person's top two or three characteristics to occupations a

³ [Happiness and Productivity](#), Oswald, Proto and Sgroi

⁴ A lot of studies support this concept. [Job Satisfaction and Employee Turnover Intention: What does Organizational Culture Have To Do With It?](#) provides a useful overview and perspective on the topic.

⁵ http://www.mckinsey.com/client_service/publip_sector/mckinsey_center_for_government/education_to_employment

⁶ "[The Development, Evolution, and Status of Holland's Theory of Vocational Personalities: Reflections and Future Directions for Counseling Psychology](#)" provides a useful summary of this work and its impact on the field of career counseling.

person might enjoy. This work eventually became the foundation of career interest assessments used throughout the world.

The language and scoring methodology in the assessment is informed by an existing assessment (the O*Net Interest Profiler), but it is executed quite differently than the typical surveys that have been used over the past 50 years in that it is engaging, entertaining, and provides visual cues via a mobile app. More information about this can be found in the [Amavitae Validity Study White Paper](#).

One of the challenges with career interest inventories is that they assume that a certain amount of freedom and opportunity is available to the user.⁷ Amavitae makes occupational recommendations based on a user's results from the assessment, but also integrates a variety of other individualized factors.

Sources for the Occupation Details and Pathways

Amavitae provides a variety of details related to specific occupations. These included: projected growth, education required and median pay. These are drawn from [O*Net](#), a career platform provided by the U.S. government. Educational options are pulled from [My Next Move](#), which is also a U.S. government-run project.

The top 25 skills for each occupation are the result of proprietary work carried out by Amavitae's data scientist.

In addition, entry-level occupations (i.e., those that require little or no education and training) feature skills that would be valuable in any job. These are drawn from an in-depth review of skills that are common across a majority of occupations, and information from the Department of Education's Employability Skills Framework and the U.S. Department of Labor, Employment and Training Administration Competency Model.

Facts in the App

The app also presents a number of facts about careers and education. The sources for each of these follow:

- More than half of young people say they know nothing about careers that pay well or academic disciplines with lots of jobs available⁸

⁷ Blustein, Kenna, et. al. summarize this nicely in "[The Psychology of Working: A New Framework for Counseling Practice and Public Policy](#)."

⁸ [Education to Employment](#), McKinsey

- Taking a year or two to get a certificate in some health fields can lead to a 31% wage increase.⁹
- Half of grads wish they'd studied something different.¹⁰
- A majority of students overestimate how much they'll earn by 45%?¹¹
- Only 42% of employers and 45% of students think graduates are prepared for the job market.¹²
- Globally, 38% of employers say they have trouble filling open jobs due to lack of qualified workers.¹³
- In 7 years, there will be 3.5 million open jobs that pay more than 75k.¹⁴
- Only 13% of the world loves their job?¹⁵

Going Forward

We intend to update this document whenever we integrate major new data sources into the Amavitae app. If you have any questions about the information presented here, please feel free to contact us at info@amavitae.com.

⁹ [Career Technical Education and Labor Market Outcomes: Evidence from California Community Colleges](#)

¹⁰ [Education to Employment](#), McKinsey

¹¹ [Overqualified and Underemployed](#), Forbes

¹² [Education to Employment](#), McKinsey

¹³ [ManpowerGroup 2015 Talent Shortage Survey](#)

¹⁴ Amavitae team's calculations based on projected job growth and median salary data as presented on www.onetonline.org.

¹⁵ [Gallup State of the American Workplace](#)