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Searching for I-O Psychology: How Practitioners, Academics, and Laypeople Engage With the I-O Brand Online

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A longstanding goal of SIOP has been to strengthen awareness and connections within the field of I-O psychology and with the general public. This goal has included initiatives such as SIOP Building Bridges: a program that has attempted to increase connections between the field of I-O psychology and those outside the field. This effort has also included initiatives to build connections between I-O psychologists, with one notable area being the effort to bridge the science-practice divide. Initiatives related to this include surveying practitioners about SIOP (Solberg & Porr, 2019) and creating membership classifications that help practitioners and master's degree holders feel part of the I-O community. Previous work has also viewed the brand identity of I-O (Gasser et al., 1998), the issues of professional identity that play a part in branding (Ryan, 2003), and the relative fluidity of I-O skills in other industries and occupations (Knudsen, 2015).

Although various means are used to move these initiatives forward, one increasingly important tool has been the online environment. SIOP maintains an in-depth website, runs webinars, publishes online white papers, and has multiple social-media presences across multiple platforms. The Internet can be a powerful tool for connection, and most people across our field use the Internet and social media in their personal and professional lives. In order to maintain relevance in the future of work, I-O psychology must leverage the Internet to strengthen awareness of the field.

Previous research has looked at the brand identity of I-O in relation to other fields (Nolan, Islam, & Quartarone, 2014) but did not review the online presence of the field. SIOP and I-O psychologists more broadly might think we are investing in the right areas of online engagement, but some questions remain unanswered: Do those outside the field currently interact with the field in those ways? Is the general public searching for tools and help in a way that fits where and how SIOP and its members are offering them? This can be true as well for those in practice. For practitioners, Solberg and Porr (2019) found that current SIOP social-media use was viewed as not particularly valuable and that many potentially valuable online resources and initiatives were not well known (Rose, Force, McCune, Spencer, & Rupprecht, 2013; Rose et al., 2014).

With such concerns, we felt it was important to begin the examination of how people inside the field of I-O psychology and those outside of the field engage with I-O psychology online and on social media. This study did so in two ways. The first was by looking at search engine patterns and search history related to I-O psychology, with the goal of answering questions like: How do people search for I-O psychology? How does I-O compare to similar fields? If we better understood search patterns, we could come up with solutions that help spread awareness of the field.

The second way was by looking at social-media hashtag usage related to I-O, with the goal of answering questions like: What hashtags do people use when talking about I-O? Is there confusion on what tags should be used versus hashtags endorsed by SIOP? How does hashtag use compare to similar fields? A deeper understanding of how social media is currently used could help SIOP, practitioners, and scholars to more effectively connect with those within the field (addressing the call made by Solberg & Porr, 2019) as well as those outside of the field. We can determine if I-O psychologists in the field need to be educated on the "right" hashtags to use (e.g., #SIOP2020 or #SIOP20) or if new decisions need to be made on what the "right" hashtag should be. Finally, we offer suggestions on future work still needed to understand how I-O psychology is engaged in and with online communities.

Google Trends Analysis

We in SIOP may know that I-O psychology is the premier field of study for workplace research and analysis, but what about the average person? When they want deeper insight into HR and organizational processes, where do they turn? If not to I-O psychology, then to where? What do we in SIOP need to do about it? In order to address these questions, we compared Google search terms for I-O psychology to tangential fields using Google Trends. Google Trends does not display absolute search volume but instead provides an index for the relative popularity of a search term for a given time and location compared to itself or other search terms. The index ranges from 1 to 100, with 100 indicating the peak popularity of the search term for the given location and time frame. A score of 0 indicates insufficient data (i.e., not enough searches). Interpreting this index is simple: a score of 100 is twice as popular as a score of 50. Google Trends provides the raw data in csv form but summarizes in line graph and bar chart forms, in addition to giving the average index score over a set period of time. As a disclaimer, we did not examine every possible pairwise comparison of search terms, only a select few (we will leave that follow-up analysis to curious readers).

Method

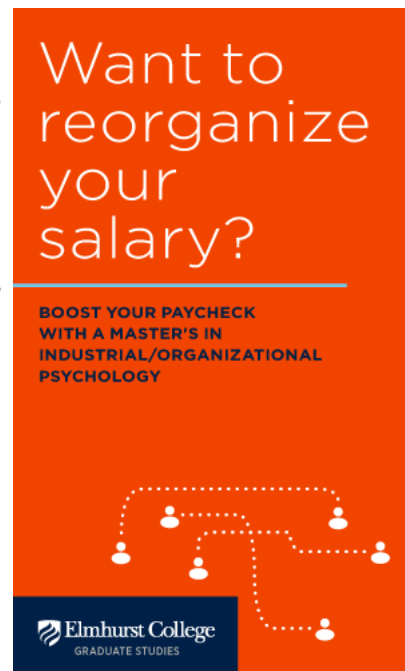
In order to compare Google searches for I-O psychology to other fields, we first needed to identify a single search term for comparison. Despite SIOP taking an official stance on branding (I-O psychology), numerous stylings of the term have emerged over time. We first compared four common formats: (a) industrial organizational psychology, (b) IO psychology, (c) I/O psychology, and (d) I-O psychology. Search terms were compared over the past 12 months (as of October 2019) in both the US alone and worldwide.

Comparing Search Terms

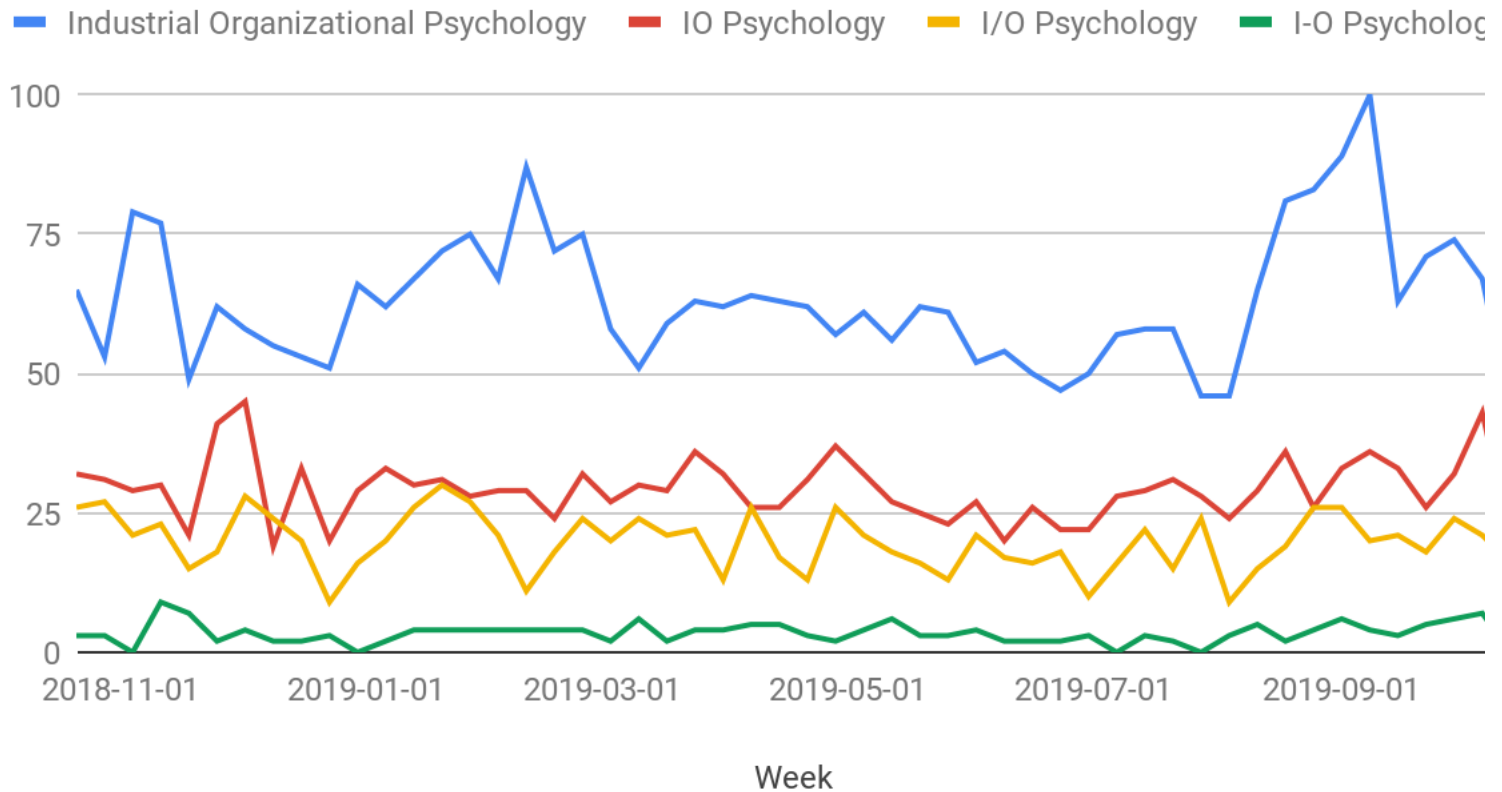
Among the four terms examined, the popularity rank order was the same for the US and worldwide. We report only on the worldwide results here to be more inclusive. "Industrial organizational psychology" was the most popular, scoring an average of 63 across the year.

"IO psychology" was the second most popular, averaging a score of 29, half as popular as the first term. "I/O psychology" was third with an average score of 20, about one third of the popularity of the first term. Finally, "I-O psychology", the official brand chosen by SIOP, was fourth in popularity, averaging a score of 4 out of 100, about 15 times less popular than the first term. These results are visualized in the figure below.

Results were further examined by region. Ten regions had available data for these four search terms, including Canada, India, Indonesia, Malaysia, Pakistan, Philippines, South Africa, the United Kingdom, the United States, and Vietnam. Six of these countries only searched for "industrial organizational psychology" and none of the abbreviations: Indonesia, Malaysia, Pakistan, South Africa, United Kingdom, and Vietnam. The other four countries all preferred searching for "industrial organizational psychology" the most, followed by "IO psychology" and "I/O psychology" respectively. Only the United States had sufficient search data for "I-O psychology" to obtain



Worldwide Comparison



an index score (1% of all searches for these four terms).

For our comparisons of I-O psychology to tangential fields, we selected “industrial organizational psychology” as the representative search term for comparison, with the understanding that the gaps between terms would be greater for terms used less than this one.

Comparing Industrial Organizational Psychology to Similar Terms

We next compared five search terms: (a) industrial organizational psychology, (b) people analytics, (c) HR analytics, (d) human capital management, and (e) talent management. To our surprise, “talent management” was the most popular search term by a huge margin. Upon further consideration, we realized that “talent management” may also include references to sports or entertainment, so conclusions about this term in the general area of workplace science and analytics are unclear. “Talent management” was the most popular term with an average score of 86 over the past 12 months worldwide, followed by “HR Analytics” with a score of 19. This means that “talent management” is searched for over four times as much as the next most popular topic. Comparably, the popularity of the remaining search terms were all very similar to one another. “People analytics” came in third with a score of 17, and “industrial organizational psychology” and “human capital management” tied for fourth with a score of 16. These data are visualized in the figure below. Removing “talent management” from the comparison scaled the results of the remaining terms in order to provide further nuance. “HR analytics” led with a score of 68, followed by “people analytics” (62), “human capital management” (58), and “industrial organizational psychology” (56).

Focusing on the US alone, the landscape is somewhat different. “Talent management” still led with a score of 81, but the second most popular term was “industrial organizational psychology” with a score of 32. “people analytics” and “human capital management” tied for third most popular with a score of 17, about half as popular as “industrial organizational psychology.” “HR analytics” was the least popular of these terms in the US with an average score of 11 out of 100. These data are visualized in the figure below.

Other search terms that were considered but didn’t quite compare to the above five in volume or relative popularity were “human capital analytics,” “workforce analytics,” and “HR science”.

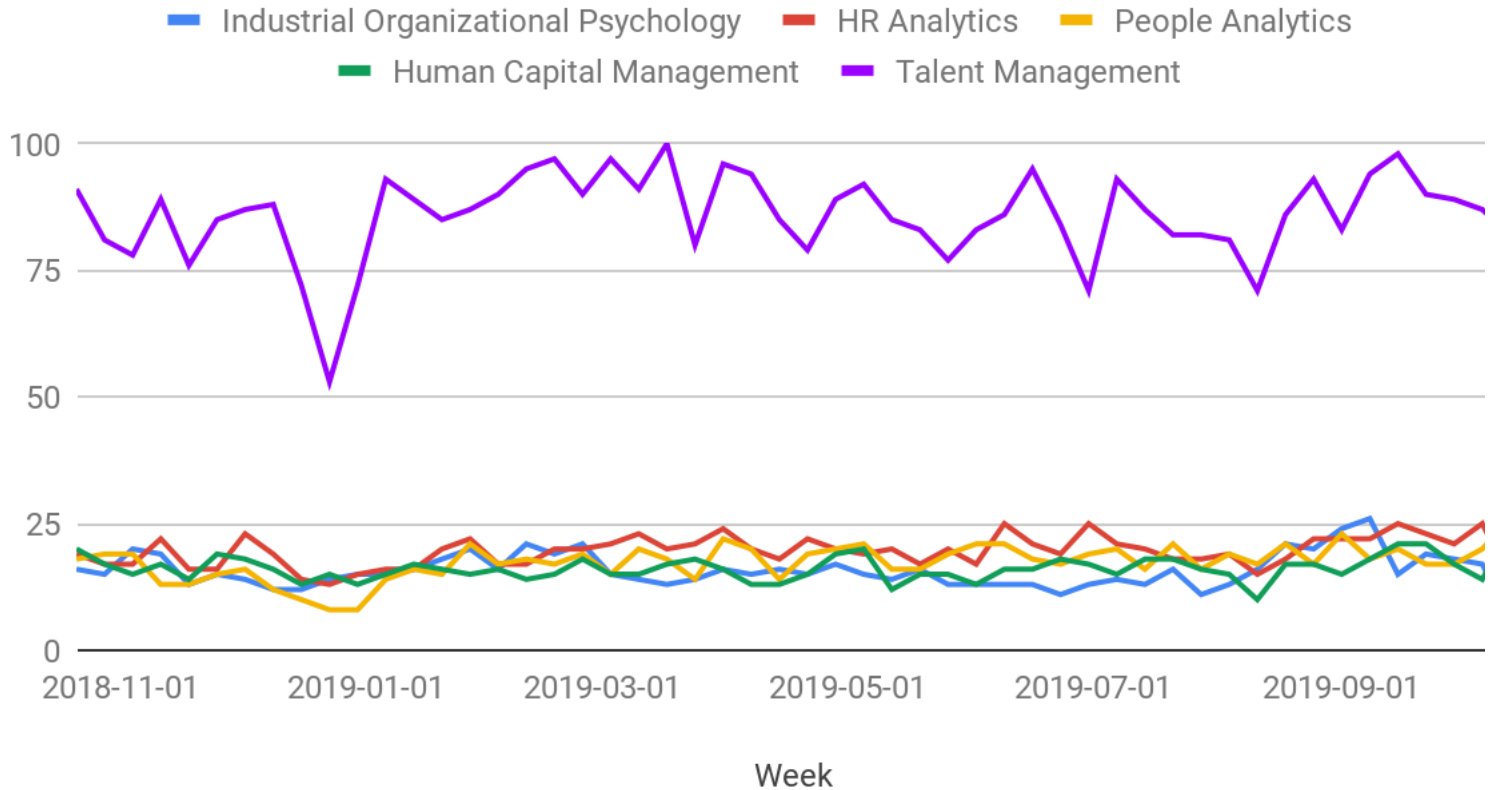
Takeaways

From these comparisons, we have drawn a few conclusions. First, despite the efforts of SIOP to consolidate our field under one term or abbreviation (I-O psychology), the rest of the world still uses a variety of other terms besides this one, which has implications for our branding and discoverability of our research. Second, there are other fields and brands of workplace research and analysis that are more popularly searched for online than industrial organizational psychology. Of course, we in SIOP know that all of these terms are basically synonymous, but the general public does not. Third, industrial organizational psychology seems to be relatively more popular in the US than many other terms but is relatively less popular worldwide. SIOP and I-O psychology as a field should give more attention to workplace research worldwide, especially as the next billion citizens of the world begin to come online and join the globalized workforce.

Social-Media Analyses

Whereas Google search queries might, in part, represent how the general public encounters online content germane to I-O psychology, social-media activity might

Worldwide Comparison



represent more of an insider perspective on the field. For example, professional associations often encourage conference attendees to tag social-media content with specific hashtags (e.g., #AOM2020, #SHRM20, and #SIOP20, for the upcoming annual conferences of the Academy of Management, the Society for Human Resource Management, and SIOP, respectively; see Thoresen & Terry, 2019). Moreover, SIOP members are avid social-media users. In 2017, 94% of respondents who took the SIOP social-media survey (Armstrong, Poepelman, Thornton, & Sinar, 2017) reported that they used social media (e.g., Facebook, LinkedIn, Twitter) with 43% of respondents having reported engaging in social media in a professional capacity (e.g., profession-related discussion). Thus, in addition to analyzing Google Trends, we explored the popularity of I-O psychology on social-media platforms Twitter and Instagram.

Twitter Hashtag Analysis

In October 2019, we used online tool Hashtagify (<https://www.hashtagify.me>) to examine the popularity of Twitter hashtags associated with I-O psychology and related topics. With this tool, users can track a hashtag's popularity ("All-time Popularity" and "Recent Popularity" reported on a scale from 0 to 100 with lower ratings close to zero indicating that a hashtag is rarely used and higher ratings closer to 100 indicating that a hashtag is among the most popular on Twitter), related hashtags, and Twitter accounts who use the hashtag the most. Researchers have used Hashtagify in published peer-reviewed studies (e.g., Cavazos-Rehg et al., 2019, Turner-McGrievy & Beets, 2015) to understand hashtags and social-media usage.

First, we searched for #IOPsych as SIOP officially endorses this hashtag. This hashtag had an All-time Popularity score of 37.5. Among influential Twitter accounts that used this hashtag the most were two SIOPers (shout-out to @EvanSinar and @surveyguy2!), the Association for Psychological Science (@PsychScience), and SIOP (@SIOPtweets). Tweets tagged with #IOPsych mostly came from the United States (71.93%) and the United Kingdom (10.53%), with other countries (e.g., Canada, India, Spain) each accounting for less than 5% of the tweets.

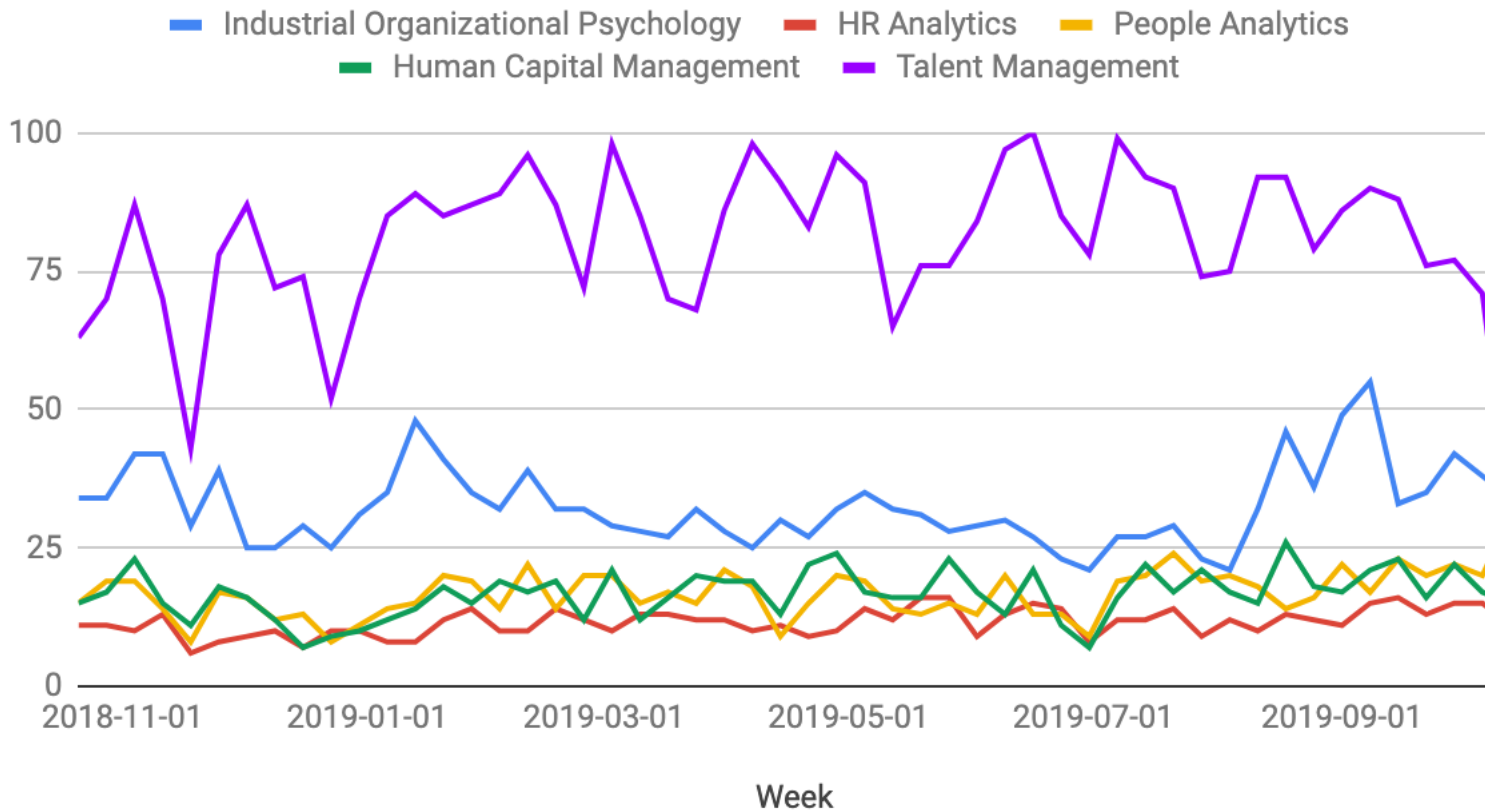
Next, we compared #IOPsych to #IOPpsychology. The latter was a relatively less popular hashtag (All-time popularity = 24.4). With regard to global use of #IOPpsychology, half of the tweets came from the United States, and half came from Spain. Hashtags related to #IOPpsychology that were more popular did not include #IOPsych, but instead included #HR, #SHRM, and, interestingly, #Amazon and #USC. Twitter searches with Boolean syntax revealed that all of the tweets tagged with both #IOPpsychology and #Amazon entailed I-O-related discussion involving Amazon (e.g., organizational culture, compensation), and all of the tweets tagged with both #IOPpsychology and #USC were associated with start-up consulting firm AGL & Associates (@AbnormalGroup), which largely comprises graduates from the University of Southern California's Master of Science in Applied Psychology Program. Given its higher popularity and SIOP's adoption, we recommend the use of #IOPsych over #IOPpsychology.

We then decided to compare #IOPsych to four hashtags that, according to Hashtagify, were related yet more popular (as of October 2019): #leadership (All-time popularity = 78.6), #BigData (All-time popularity = 76.7), #HR (All-time popularity = 73.4), and #OrgDev (All-time popularity = 40.9). As a set compared to #IOPsych, these hashtags were used across a wider spread of countries and contexts. Perhaps these hashtags—with the exception of #OrgDev, which is only slightly more popular than #IOPsych—are more popular given that they refer to broader topics that cut across various contexts and disciplines rather than a discrete field.

Instagram

As an extension of our analysis on I-O psychology in social media, we studied the Instagram presence of three large professional organizations directly or tangentially connected to I-O psychology: SIOP, SHRM, and ATD. Using an online analytics tool (www.ninjalitics.com), we captured a number of metrics for each organization, including: account age, number of posts, post rate, "followers" and "following" counts, and average likes. As of this writing, SIOP's Instagram has been least active, with

United States Only



only 23 posts and a lifetime post rate of 0.7 posts per week. In contrast, SHRM's Instagram has 380 posts and a post rate of 2.2 posts per week. Finally, ATD's Instagram post count is 333 at a rate of 1.9 posts per week. Further, SIOP also has the lowest Follower/Following Multiple (number of followers divided by number of following) at 7, compared with SHRM's 53 and ATD's 8. In terms of latest activity, SIOP had not posted in nearly three months, versus just 1-2 days for both SHRM and ATD. These insights converge around an anecdotal conclusion that SIOP does not appear to heavily utilize Instagram as a medium for marketing or outreach. In contrast, SHRM and ATD seem to maintain steady, active presences on Instagram.

When using the tool to further review hashtags used by these organizations, two unique strategies seem to emerge. ATD and SIOP both had top-five most common hashtags that were direct call outs to related events or initiatives (e.g., #ATD2020, #ATDMemberWeek, #SIOP19, #washingtondc). Notably absent from SIOP's top-five hashtag list was #IOPsych, whereas SIOP instead seems to leverage #iopsychology on Instagram. SHRM's top hashtags were not always direct call outs to their own organization but appeared to be slightly more generalizable in nature (e.g., #HR, #AskHR, #Leadership, #MyWorkCulture).

Instagram seems to be an underutilized platform across the I-O-psychology discipline. Opportunities to improve engagement on the platform include increasing post volume to inspire a stronger and more regular presence in the Instagram conversation, which could have the added benefit of highlighting the active nature of the I-O field. Further, better aligning SIOP's Instagram hashtags to those used on platforms with higher I-O engagement (e.g., Twitter) could help to boost community interaction and presence on Instagram.

Conclusion

In this article we looked to review data on how the field of I-O connects with those inside the field and outside of it online and through social media. In our analysis of search engine use, we found the official designation for the field, "I-O Psychology," is searched for significantly less than a number of other name variants, with the fully spelled out term "Industrial Organizational Psychology" being the most common. This suggests that when we consider outreach, we might consider using such terms in conjunction with "Industrial Organizational Psychology." We also found a number of tangentially related HR terms that have a significantly greater volume of search and possibly awareness. The authors would recommend that SIOP continue its marketing efforts so that I-O psychology appears as well under these terms and could help lead online users to find the field and the value it brings.

Looking to social media, we found that the official hashtag of SIOP (#iopsych) is the most popular I-O psychology term but that there are a number of more popular related hashtags such as #HR and #leadership. Instagram remains a lightly used social-media platform for I-O psychology, but if SIOP desires more engagement, SHRM may act as decent model to follow.

Overall, our results offer an initial look into I-O psychology engagement online. These results can be used by SIOP and other I-O groups to help target future online outreach and engagement efforts with others in the field. Future work could examine in more depth particular platforms highlighted here or other social-media sites that were not currently examined such as LinkedIn and Facebook.

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