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Many forces at play: Ethical dilemmas in academic research

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free" classification system and treat the proposed structural forms as "parent nodes" in a hierarchical taxonomy (c.f., Bosco et al., 2017; National Information Standards Organization, 2005). Put differently, we encourage researchers to branch from major classifications of ethical dilemmas to finer-level abstractions, which will aid the development of "context-free" and "context-specific" paradigmatic structural forms to classify ethical dilemmas. We contend that the use of parent nodes may alleviate concerns brought about by varied terminology across contexts and, thus, facilitate inter-disciplinary research. In contrast, the addition of children nodes may help to improve our understanding of the manifest nature of ethical challenges within disciplines. Furthermore, visualizing ethical dilemma's nomological network in this way will help researchers and practitioners to better understand the breadth and depth of choice predicaments across contexts, which is aligned with the concept of customer centric science (Aguinis et al., 2010).

> To illustrate our proposal, we draw on the literature on questionable research practices (QRPs) to augment Lefkowitz's (2021) taxonomy in the I-O academic context (see Figure 1), a setting in which ethical dilemmas are very common according to the focal article¹. QRPs have been defined as "design, analytic, or reporting practices that have been questioned because of the potential for the practice to be employed with the purpose of presenting biased evidence in favor of an assertion" (Banks et al., 2016, p. 3). As such, ethical dilemmas in an academic context (see Lefkowitz, 2021; Table 1) may manifest as QRPs. Although there is an ample number of narrative and empirical reviews on the consequences of this type of ethical dilemma (e.g., Fiedler & Schwarz, 2016; Bosco et al., 2016), the question of how and why QRPs may arise is a relatively understudied and, thus, not well understood in I-O research. Put differently, the consequences of QRPs are often studied, but the potential causes are not. Thus, we augment

In the focal article, Lefkowitz (2021) defined "ethical dilemma" as a situation in which an agent is faced with two or more valid choices. Although each choice can be considered "ethical," selecting one generally means the remaining choices cannot be enacted, resulting in at least one moral failure. In other words, as opposed to incivility or corruption where there is general agreement over morally right and wrong actions, ethical dilemmas involve conflicts between two or more equally valid moral norms and ethical perspectives. Lefkowitz's analysis of choice predicaments experienced by SIOP members offered initial support for a proposed taxonomy of ethical dilemmas in I-O research and practice. However, the focal article did not explain why these ethical dilemmas might have arisen in the first place. Given the high amount of coercive behavior (37.3%) and its prevalence across academic contexts (12.9% in academic research, 9.4% in academic supervising and mentoring, and 7.6% in academic teaching and administration), we believe it prudent to explore the reasons for why these ethical dilemmas have been reported in academia. Indeed, one might expect that academia would feature fewer ethical dilemmas given the structured nature of research and publications, tenure and promotion, and Institutional Review Board policies. However, the focal article's findings reinforce the growing public awareness of ethical "gray areas" in academia (e.g., Conn, 2016; Ferguson, 2015), lending further support to the need to explore why ethical dilemmas arise.

To better understand why ethical dilemma types and rates differ across contexts, we encourage future researchers to augment Lefkowitz's (2012) "context-

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could be nested under different parent nodes (e.g., coercion). Our goal is to illustrate how Lefkowitz's (2021) taxonomy can be augmented, not necessarily how it should be augmented.

¹ For illustrative purposes only, we display QRPs and the proposed sources of ethical dilemma as second- and third-level nodes under temptation, respectively. We concede that these child nodes

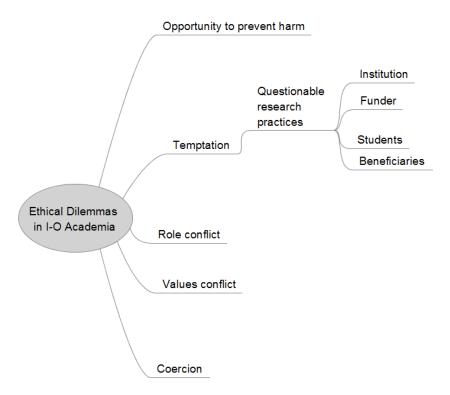


Figure 1. Example of how Lefkowitz's (2021) taxonomy of ethical dilemmas can be augmented.

Lefkowitz's (2021) taxonomy even further by adding four potential sources of ethical dilemma in the I-O academic context, which may pressure researchers to behave in a certain way (e.g., engage in QRPs). The four sources are: the institution, the funder, the students, and the beneficiary. In the following sections we describe each one and draw from recent research and findings on academic research ethics to describe how these forces may conflict and create ethical dilemmas for I-O researchers. In doing so, we hope to promote future discourse and research on illuminating the reasons *why* ethical dilemmas arise and ultimately lead to negative outcomes.

The Institution

Although the academic institution and its policies and procedures can generally be assumed to be well-intentioned (i.e., supporting researchers' success and ethical behavior), the reality is that the very forces that are meant to support researchers can create ethical dilemmas. Two specific examples have garnered attention in recent years. First, tenure and promotion policies, especially in research universities, generally place large emphasis on quantity of research output. Although research output is a conventional measure of ac-

ademic success, the tendency to over-emphasize quantity over quality has created numerous QRPs including pressure to publish in less-than-reputable journals (Altbach & de Wit, 2018), adjusting authorship order based on need for publications rather than actual contribution (Von Bergen & Bressler, 2017), and prioritizing number of articles published over significance and contribution to theory and practice (Jaschik, 2006). This "publish or perish" mentality is perhaps a major root cause of the downstream negative outcomes found in academic research today, ranging from replication issues, to an aversion to null findings that are "unpublishable" (despite being theoretically significant), to the proliferation of poor-quality academic journals and articles. Notably, the rush for publication can later backfire in highly publicized and controversial retractions, but not before policy-makers and the general public have already cited and made decisions based on false evidence (e.g., Piller, 2021). Edwards and Roy (2017) succinctly delineated how well-intentioned institutional incentives (e.g., tenure and promotion for research productivity, and even higher-level incentives such as federal funding based on number of degrees granted) can result in numerous undesirable effects and unethical behaviors such as substandard publications, grade inflation, efforts to manipulate public rankings, and more.

Second, Lefkowitz (2017) explained at length how Institutional Review Board (IRB) policies (e.g., obtaining informed consent), which are often written in a generalizable way for all fields of study, may introduce unique ethical dilemmas for I-O psychology researchers. For example, he noted that confidentiality and deception are less salient issues for I-O psychology research, given that our research tends to be survey-based and work-related, as opposed to more sensitive and/or physical health-related topics explored in clinical or medical research. This has led to some perspectives that IRB policies are over-reaching and potentially threatening to the validity of I-O research; Ilgen and Bell (2001) reported that 44% of Journal of Applied Psychology and Personnel Psychology authors admitted to bypassing IRB approval for their studies. In short, the very policies set in place to create ethical standards could potentially create ethical dilemmas that drive researchers, who are already striving to meet research goals for tenure or promotion, to engage in QRPs that bypass policies perceived to be "inconsequential" in I-O research.

The Funder

As researchers come under increased pressure to secure external funding to support their work, a second force often comes into play: the granter, or funder, supporting a research study. Edwards and Roy (2017) criticized how the growing dependence on external grants, coupled with decreasing amounts of external grant funding, is creating an environment that is "hypercompetitive, susceptible to reviewer biases, and strongly dependent on prior success as measured by quantitative metrics" (p. 55). This accentuates the "perverse incentives" described earlier that could pressure researchers to prioritize career advancement in their decision-making. Moreover, the presence of an external party with a direct financial stake in research could drive the use of ORPs to present favorable results based on the interests of the external party. Lefkowitz (2017), drawing from evidence in other fields of study such as nutrition research, described how studies with industry funding are significantly incentivized to produce favorable conclusions for the industry who is fronting the money (p. 475). While it is entirely possible that such results are due to intentionally falsified and corrupted research, we again focus on ethical dilemmas where researchers are desiring to behave ethically but are unable to enact all desired outcomes (i.e., a win-lose situation). Simmons and colleagues (2011) described how "undisclosed flexibility in data collection and analysis" give researchers room to present findings in ways that are not necessarily intentional lies, but are made to appear more palatable to external stakeholders (i.e., the granter or funder; p. 1359). Moreover, Lilienfeld (2017) described how the "grant culture" de-incentivizes direct replications (which are incredibly important as a quality control mechanism to identify poorly conducted research), stifles creativity and limits research to fundable topics, and encourages over-promising in grant applications. To conclude, the presence of external research funding may result in an unintended consequence. Put differently, although external grants are not unethical in and of themselves, their presence may pressure researchers to engage in QRPs to produce the deliverables or predictions stated in grant proposals or funding agreements.

The Students

In a perfect world, an individual would enter academia to create and share knowledge and to train the next generation of students. Indeed, one rosy view of the academic industry suggests that academia is a true "pay-it-forward" environment, where professors invest (often at their own expense) in their students' success, who then invest in their students' success and so on (Hancock & Curran, 2020). Assuming that most researchers in academia have at least some degree of this self-sacrificing commitment to their students, there is considerable irony that such a moral pursuit might lead to ethical dilemmas. As Lefkowitz (2021) noted in the focal article, several of the most frequently reported ethical dilemmas have to do with academic mentoring and teaching. Yet, commitment to one's students can directly conflict with commitment to one's institutional requirements (e.g., promotion and tenure) or a funding agency. Niles and colleagues (2020) reported that most institutions still prioritize publication metrics over teaching and student mentorship, creating an ethical dilemma where dedication to one's students may directly conflict with one's personal career goals. For example, imagine a researcher is pressured by their college to obtain external grants and provide their students with research opportunities. This situation, which is not uncommon in I-O psychology departments, may produce an ethical dilemma that forces researchers to choose between pursuing an outcome that is desired by their employer (i.e., obtaining a grant) and one that validates their decision to enter academia (i.e., nurture their students).

Moreover, faculty are often incentivized to convert their graduate students into active junior scholars so that they are well prepared for the academic job market. After all, academic job placements are another indicator of performance in I-O academia. However, competition for I-O academic jobs is increasing over time (Reinero, 2019) – a trend that may be accentuated because of the ongoing global pandemic and increased cuts to university budgets (Hubler, 2020). Put simply, in the years ahead, there may be more I-O graduates than I-O academic jobs. What does this mean for those who mentor I-O students? It means that they must be pushed to do more if they want a career in academia (e.g., publish or perish), despite the potentially poor job opportunities and the hypercompetitive atmosphere that future students are likely to end up in (Pannapacker, 2012; Villaneuva, 2014). To this end, QRPs may pervade the faculty-staff relationship as faculty push their students to produce as much research output as possible. In addition, it is well known that I-O psychologists can typically earn more money and have more job opportunities in applied settings than in academic settings. Consequently, a faculty member may find themselves asking: Can I, in good conscience, encourage a student to pursue a career in academia? Indeed, this scenario illustrates the multidimensionality of ethical dilemmas and how our proposed hierarchical taxonomic map can capture this phenomenon. Specifically, this scenario shows how the same ethical dilemma (i.e., student) can manifest as different ethical dilemma types (e.g., role conflict vs. values conflict vs. opportunity to prevent harm).

The Beneficiary

The final source of ethical dilemma introduced in our commentary is the beneficiary of I-O research. In some cases, the beneficiary is an organization that is partnering with and/or providing resources to the researcher; in others, it is the broader society. Academics collaborate with organizations for a variety of reasons (e.g., commercialization, reputation, prestige, to gain access to marginalized employee groups [see Ruggs et al., 2013]). Indeed, there are many potential advantages to university-industry collaborations (for an example, see Callart et al., 2015). Yet, at times, a university-industry collaborative effort can be characterized as a "double edged sword" (Banal-Español et al., 2015). Simply put, similar to the pressures arising from granters and funders, direct beneficiaries of a study (e.g., a collaborating organization) may pressure a researcher to engage in ORPs. Lapierre and colleagues (2018) described several potential "red flags" in their set of guidelines on conducting research in organizations, such as when organizations request to substantially edit

study materials or project design or ask for access to data in ways that may threaten confidentiality. In their response to Lapierre and colleagues (2018), Maynard and colleagues (2018) further explicated the "balancing act" required to "conduct publishable research with robust practices and designs while also appearing the needs and expectations of organizational members and leaders" (p. 625), which may even include suppressing the dissemination of scientific findings (Nelson, 2004). I-O research may be particularly susceptible to such dilemmas, given that our topic areas often affect broadreaching policy recommendations, especially in areas such as labor law (e.g., SIOP's Government Relations and Advocacy Team). For example, Schulte and colleagues (2015) described several areas where well-being research could be incorporated into public policy. They noted, however, that this comes with numerous challenges including debate over how well-being is measured, who (i.e., government, organization, etc.) is responsible for maintaining well-being, and the difference between subjective and objective well-being. In other words, I-O research may sometimes face the added dilemma of considering how one's research might be used, whether appropriately or inappropriately, by policy-makers. Taken together, as committed as a researcher might be to the highest standards of ethical practice, the need to negotiate and compromise with the beneficiary of one's study (i.e., the organization, or policy-makers) in order to conduct basic and applied research may pose a legitimate challenge to adhering to said ethical standards.

Concluding Thoughts

Lefkowitz (2021) noted that "less than one-third of the [ethical dilemmas] were resolved satisfactorily or mostly satisfactorily" (p. 28). Indeed, it is possible that resolution rates will improve if greater attention is given to understanding why ethical dilemmas arise in I-O academic and applied settings. To aid in this endeavor, our commentary illustrates how Lefkowitz's (2021) taxonomy of ethical dilemmas can be augmented to include finer-level abstractions of choice predicaments in an I-O academic context. Importantly, our commentary is not an indictment of Lefkowitz's (2021) taxonomy, nor is it meant to offer excuses for engaging in QRPs, but rather it is an illustration of how it can serve as a guidepost for future theory and empirical inquiry on the paradigmatic structural forms of ethical dilemmas at varying levels of generality. Taken together, after mulling over what the findings reported in the focal article might suggest, we contend that the interplay between ethical dilemmas and questionable research practices in I-O academia is understudied and, thus, needs much additional study (see Zhou & Kuykendall, 2021 for a panel discussion on this specific topic). We commend the laudable work has been carried out in recent years to thwart QRPs in I-O academia, especially with regard to data transparency and pre-registration of studies (e.g., Open Science Collaboration, 2015; Gonzales & Cunningham, 2015). Still, there is much left to be done on this front. We believe that Lefkowitz's (2021) taxonomy, and our suggestion to expand it, will help us to better understand how ethical dilemmas may manifest as QRPs and, thus, contribute to the agenda aimed at improving the trustworthiness of I-O research.

References

- Aguinis, H., Werner, S., Lanza Abbott, J., Angert, C., Park, J. H., & Kohlhausen, D. (2010). Customer-centric science: Reporting significant research results with rigor, relevance, and practical impact in mind. *Organizational Research Methods*, *13*(3), 515-539. https://doi.org/10.1177/1094428109333339
- Altbach, P. G., & de Wit, H. (2018, September 7). Too much academic research is being published. *University World News*. Retrieved from https://www.universityworld-news.com/post.php?story=20180905095203579
- Banal-Estañol, A., Jofre-Bonet, M., & Lawson, C. (2015). The double-edged sword of industry collaboration: Evidence from engineering academics in the UK. *Research Policy*, 44(6), 1160-1175. https://doi.org/10.1016/j.respol.2015.02.006
- Banks, G. C., O'Boyle, E. H., Pollack, J. M., White, C. D., Batchelor, J. H., Whelpley, C. E., Abston, K. A., Bennett, A. A., & Adkins, C. L. (2016). Questions about questionable research practices in the field of management. *Journal of Management*, 42(1), 5–20. https://doi.org/10.1177/0149206315619011
- Bosco, F. A., Aguinis, H., Field, J. G., Pierce, C. A., & Dalton, D. R. (2016). HARKing's threat to organizational research: Evidence from primary and meta-analytic sources. *Personnel Psychology*, 69(3), 709-750. https://doi.org/10.1111/peps.12111
- Bosco, F. A., Uggerslev, K. L., & Steel, P. (2017). MetaBUS as a vehicle for facilitating meta-analysis. *Human Resource Management Review*, 27(1), 237-254. https://doi.org/10.1016/j.hrmr.2016.09.013
- Callaert, J., Landoni, P., Van Looy, B., & Verganti, R. (2015). Scientific yield from collaboration with industry: The relevance of researchers' strategic approaches. *Research Policy*, 44(4), 990-998. https://doi.org/10.1016/j.respol.2015.02.003
- Conn, S. (2016, December 14). Ask the ethicist, faculty edition. Inside Higher Ed. Retrieved from https://www.insidehighered.com/advice/2016/12/14/scholar-examines-some-ethical-dilemmas-academe-essay
- Edwards, M. A., & Roy, S. (2017). Academic research in the 21st century: Maintaining scientific integrity in a climate of perverse incentives and hypercompetition. *Environmental Engineering Science*, *34*(1), 51-61. https://doi.org/10.1089/ees.2016.0223

- Ferguson, C. J. (2015). Everybody knows psychology is not a real science. *American Psychologist*, 70(6), 527-542. https://doi.org/10.1037/a0039405
- Fiedler, K., & Schwarz, N. (2016). Questionable research practices revisited. *Social Psychological and Personality Science*, 7(1), 45-52. https://doi.org/10.1177/1948550615612150
- Gonzales, J. E., & Cunningham, C. A. (2015, August). The promise of pre-registration in psychological research. *American Psychological Association*. Retrieved from https://www.apa.org/science/about/psa/2015/08/pre-registration
- Hancock, G., & Curran, P. (2020, February 18). Episode 15: Academia and the Chamber of Secrets. *Quantitude*. Retrieved from https://www.buzzsprout.com/639103/2746735-episode-15-academia-and-the-chamber-of-secrets
- Hubler, S. (2020, October 26). Colleges slash budgets in the pandemic, with "nothing off-limits." *The New York Times*. Retrieved from https://www.nytimes.com/2020/10/26/us/colleges-coronavirus-budget-cuts.html
- Ilgen, D. R., & Bell, B. S. (2001). Conducting industrial and organizational psychological research: Institutional review of research in work organizations. *Ethics & Behavior*, 11(4), 395-412. https://doi.org/10.1207/S15327019EB1104_03
- Jaschik, S. (2006, December 8). Rethinking tenure and much more. *Inside Higher Ed*. Retrieved from https://www.insidehighered.com/news/2006/12/08/rethinking-tenure-andmuch-more
- Lapierre, L. M., Matthews, R. A., Eby, L. T., Truxillo, D. M., Johnson, R. E., & Major, D. A. (2018). Recommended practices for academics to initiate and manage research partnerships with organizations. *Industrial and Organizational Psychol*ogy, 11(4), 543-581. https://doi.org/10.1017/iop.2018.83
- Lefkowitz, J. (2017). Ethics and values in industrial-organizational psychology (2nd ed.). Routledge.
- Lefkowitz, J. (2021). Forms of ethical dilemmas in industrial-organizational psychology. *Industrial and Organizational Psychology*. Advance online publication. Retrieved from https://www.siop.org/Research-Publications/IOP-Journal/IOP-Focal-Articles
- Lilienfeld, S. O. (2012). Public skepticism of psychology. American Psychologist, 67(2), 111-129. https://doi.org/10.1037/a0023963
- Maynard, M. T., Conroy, S., & Lacerenza, C. N. (2018). It takes two to tango: The management of academic–industry partnerships requires multiple perspectives. *Industrial and Organizational Psychology*, 11(4), 625-629. https://doi.org/10.1017/iop.2018.125
- National Information Standards Organization (US) (2005). *Guidelines for the construction, format, and management of monolingual controlled vocabularies*. NISO Press.
- Nelson, R. R. (2004). The market economy, and the scientific commons. *Research Policy*, *33*(3), 455-471. https://doi.org/10.1016/j.respol.2003.09.008
- Niles, M. T., Schimanski, L. A., McKiernan, E. C., & Alperin, J. P. (2020). Why we publish where we do: Faculty publishing values and their relationship to review, promotion and tenure expectations. *PloS one*, 15(3), e0228914. https://doi.org/10.1371/journal.pone.0228914
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, *349*(6251), 943-952. https://doi.org/10.1126/science.aac4716

- Pannapacker, W. (2012). Should students be encouraged to pursue graduate education in the humanities? *Journal of Markets & Morality*, *15*(2), 445-451. Retrieved from https://www.marketsandmorality.com/index.php/mandm/article/view-File/800/758
- Piller, C. (2021, January 15). Many scientists citing two scandalous COVID-19 papers ignore their retractions. Science. Retrieved from https://www.sciencemag.org/news/2021/01/manyscientists-citing-two-scandalous-covid-19-papers-ignore-theirretractions
- Reinero, D. A. (2019, October 23). The path to professorship by the numbers and why mentorship matters. *Behavioural & Social Sciences*. Retrieved from https://socialsciences.nature.com/posts/55118-the-path-to-professorship-by-the-numbers-and-why-mentorship-matters
- Ruggs, E. N., Law, C., Cox, C. B., Roehling, M. V., Wiener, R. L., Hebl, M. R., & Barron, L. (2013). Gone fishing: I–O psychologists' missed opportunities to understand marginalized employees' experiences with discrimination. *Industrial and Organizational Psychology*, 6(1), 39-60. https://doi.org/10.1111/jops.12007

- Schulte, P. A., Guerin, R. J., Schill, A. L., Bhattacharya, A., Cunningham, T. R., Pandalai, S. P., Eggerth, D., & Stephenson, C. M. (2015). Considerations for incorporating "well-being" in public policy for workers and workplaces. *American Journal of Public Health*, 105(8), e31-e44. https://doi.org/10.2105/AJPH.2015.302616
- Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22(11), 1359-1366. https://doi.org/10.1177/0956797611417632
- Villanueva, M. (2014). The hybrid imperative: Managing post-graduation employment in the humanities. *In Progress Journal*. Retrieved from http://inprogressjournal.net/current-issue-2014/the-hybrid-imperative-managing-post-graduation-employment-in-the-humanities
- Von Bergen, C. W., & Bressler, M. S. (2017). Academe's unspoken ethical dilemma: Author inflation in higher education. *Research in Higher Education Journal*, *32*, EJ1148909. Retrieved from https://eric.ed.gov/?id=EJ1148909
- Zhou, S., & Kuykendall, L. (2021, April 15-17). When infrastructure and ethics collide: A panel on ethical policy-making in higher ed [Panel discussion]. Society for Industrial and Organizational Psychology Annual Convention, Online. [Panelists: Chen, G., Pierce, C. A., McAbee, S. T., & Thornton-Lugo, M. A.]