**Cybervetting: Facebook is Dead, Long Live LinkedIn?**

Nicolas Roulin

Saint Mary's University

Department of Psychology, 923 Robie Street, Halifax, NS, Canada, B3H 3C3,

nicolas.roulin@smu.ca

Sébastien Fernandez

Ecole hôtelière de Lausanne

HES-SO University of Applied Sciences and Arts Western Switzerland, Route de Cojonnex 18,

1000 Lausanne 25, Switzerland, Sebastien.FERNANDEZ@ehl.ch

Wilcox et al.'s (2022) focal paper brings to the fore important practical questions, such as whether or not organizations should cybervet job applicants' social media profiles or what the risks and benefits associated with cybervetting can be for employers. The authors also provide a relevant overview of work done by psychology and management researchers to better understand the psychometric properties (e.g., validity, reliability) of social media assessments, potential group differences, legal or ethical issues, risk of adverse impact associated with such practices, as well as applicant reactions (e.g., whether such practices are perceived as fair or as an invasion of privacy). Overall, we fully agree with Wilcox et al. (2022) that all these elements must be carefully considered, more research is needed, and clearer standards must be established before encouraging or discouraging organizations to cybervet.

In this commentary, we argue that the existing empirical evidence associated with the elements listed above, standards to be created, or guidelines to be provided to practitioners largely differ depending on the social media platform used. While Wilcox et al. (2022) reviewed a large body of work examining both personal (e.g., Facebook, Twitter, Instagram) and professional (e.g., LinkedIn) social media, we believe that their conclusions to generally avoid cybervetting are largely based on empirical evidence from personal social media. However, we argue that different conclusions could be reached if one specifically considers professional social media platforms like LinkedIn. In addition, focusing on such platforms would actually help align with several suggestions made by Wilcox et al. (2022) about cybervetting in general, such as assessing person-job fit and applicants' knowledge, skills, and abilities.

**A Re-examination of Cybervetting via Facebook**

Wilcox et al. (2022) have effectively summarized the largely disappointing evidence from Facebook-based cybervetting research. Indeed, while initial work suggested that Facebook

could be a promising source of information to assess personality (Kluemper et al., 2012),

subsequent research painted a much depressing picture: Facebook-based assessments were

associated with poor criterion-related validity, legally-protected information being highly visible,

high risk of adverse impact based on race or gender, a tendency for hiring managers to look

mostly for negative information on applicants' profiles, and negative applicant reactions

(Hartwell & Campion, 2020; Stoughton et al., 2015; Van Iddekinge et al., 2016; Zhang et al.,

2020). These findings can be seen as surprising considering the research showing how behavioral

traces contained on personal social media can predict personality (Azucar et al., 2018) and that

personality predicts job outcomes such as job performance, organizational citizenship behaviors,

or counterproductive work behaviors (Sackett & Walmsley, 2014).

Although this might be disappointing for organizations hoping to find valid behavioral

traces of individuals' knowledge, skills, abilities, and other characteristics on personal social

media, such platforms were not designed to deliver information for personnel decisions. It is also

well-established that people behave differently across situations and contexts (Mischel et al.,

2002). For instance, someone may be very extraverted with friends but more reserved in a work

context. Moreover, there is evidence that self-reported personality measures better predict

workplace outcomes when items are framed in a work context (vs. noncontextualized; Shaffer &

Postlethwaite, 2012). Overall, people act differently across contexts, and only information

pertaining to work behaviors should be useful for predicting work outcomes, thus making

Facebook a sub-optimal source of information for organizations. In addition, people (especially

younger users) are starting to move away from Facebook to join other platforms, like TikTok

(Anderson, 2022). Only 27% of adolescents have a Facebook account today, compared to 94% in

2012 (Press-Reynoldd, 2021). As such, we largely concur with the arguments provided by

Wilcox et al. (2022), suggesting cybervetting through *personal* social media like Facebook constitutes a dead-end for hiring managers, organizations, and researchers.

**Each Social Media Platform is a Technology in Itself**

Landers and Marin (2021) recently introduced a framework explaining how to best integrate technology in industrial/organizational psychology research. In short, they argued that researchers should apply a *technology-as-designed* paradigm, which considers technologies in terms of their unique design characteristics and intended users. Applying that perspective to cybervetting, one must thus consider different social media platforms (i.e., technologies) separately. Indeed, personal social media platforms like Facebook and professional ones like LinkedIn were designed with different goals and users in mind: The former was meant to facilitate connections and interactions between friends or family members, whereas the latter was designed with professional networking and career-related goals in mind (Davis et al., 2020). Moreover, LinkedIn profiles function like an extended and regularly-updated online resume, include more work-related information (e.g., detailed descriptions of work experiences, list of skills, endorsements by colleagues and supervisors), and the platform itself is designed to foster interactions with professional connections (coworkers, clients, and potential employers), thus offering much less personal or legally-protected information than Facebook (Zide et al., 2014). We thus argue that cybervetting research should clearly distinguish platforms, and recommendations provided to practitioners should be platform-specific.

**Cybervetting via LinkedIn: Empirical Evidence**

In contrast to Facebook, LinkedIn continues to attract an increasing number of users, with over 690 million in 2020 and 810 million according to the most recent estimates provided by the

platform. Job seekers report more favorable attitudes towards cybervetting done via LinkedIn than via Facebook, Instagram, or Twitter, perceiving LinkedIn as being fairer, less invasive, and more face-valid (Cook et al., 2020). LinkedIn is also viewed as a beneficial platform by job seekers to obtain information about employers, career opportunities, and to find employment (Davis et al., 2020; Utz, 2016). Therefore, Wilcox et al.'s (2022) conclusion that cybervetting leads to negative reactions by job seekers might not apply to LinkedIn.

Wilcox et al. (2022) rightly ask whether social media assessments can be used as a valid, relevant, and justifiable hiring criterion. While the evidence is certainly lacking for Facebook, recent empirical findings suggest that LinkedIn could be a more useful (i.e., reliable and valid) cybervetting tool. For instance, van de Ven et al. (2017) reported adequate inter-rater reliability between independent assessors for personality-based ratings from LinkedIn profiles. Roulin and Levashina (2019) also reported satisfactory inter-rater reliability for some personality traits (e.g., agreeableness, extraversion), cognitive ability, and some skills (e.g., communication and information seeking). There is also some evidence of convergent validity for some personality traits, skills, and abilities, with LinkedIn-based ratings performed by untrained assessors correlating with self-reports of extraversion, visible skills (leadership, planning, communication), and cognitive ability test scores (Roulin & Levashina, 2019; van de Ven et al., 2017). Importantly, LinkedIn-based ratings show limited adverse impact (Roulin & Levashina, 2019).

Studies also showed that specific LinkedIn profile elements can be associated with psychological constructs. For instance, Roulin and Levashina (2019) observed that the presence of a summary indicated communication, leadership, and cognitive ability, whereas the number of connections a person has on LinkedIn was related to leadership, communication, planning, and extraversion. Fernandez et al. (2021) demonstrated that LinkedIn profiles contain indicators of

extraversion (e.g., number of connections), conscientiousness (e.g., reported academic grades), agreeableness (e.g., teamwork listed as a skill), and openness to experience (e.g., creativity listed as a skill). Table 1 summarizes LinkedIn indicators and associated psychological constructs.

There is also some preliminary evidence for the criterion-related validity of LinkedIn-based cybervetting. For instance, hiring recommendations based on LinkedIn profiles are positively associated with the obtention of a job in line with one's degree or obtaining a promotion (Roulin & Levashina, 2019). LinkedIn profiles features suggesting that a worker possesses higher "social capital" (e.g., recommendations) are associated with higher productivity and lower absenteeism (Aguado et al., 2019). Finally, a recent study showed that sales employees who have their company logo as their background picture and a summary section in their profile performed better on two different sales metrics (expending current business, bringing new business; Cubrich et al., 2021). Overall, while more research is needed, initial evidence that LinkedIn can predict workplace outcomes is promising.

**What Should Future LinkedIn Cybervetting Research Focus on?**

Future LinkedIn-based cybervetting research could more fully examine how to best use information contained on LinkedIn profiles. For instance, while research on personal social media has shown the potential to automatically assess personality based on profile content and posts (Tay et al., 2020), no research has examined this with professional platforms. Yet, the language used in LinkedIn profile summaries or to describe work experiences might uncover insights about users' personality. Alternatively, the content that individuals post, like, share, or comment on might provide useful information about LinkedIn users.

Future research examining the convergent validity of LinkedIn-based assessments should rely on self-report measures contextualized in the workplace (vs. general measures), whereas

studies examining criterion-related validity should focus on specific psychological constructs, profile elements, and outcomes based on a job analysis. For instance, Cubrich et al. (2021) explored if LinkedIn profile elements could predict sales performance, but they did not identify specific elements that should theoretically be related to performance in this occupation. For example, extraversion is related to both sales performance (Vinchur et al., 1998) and LinkedIn content (e.g., number of connections; Fernandez et al., 2021). Thus, future studies could explore if content like the number of connections predicts sales performance. Research could also explore if information from LinkedIn profiles predicts other outcomes, such as counterproductive work behaviors and organizational citizenship behaviors, or adds incremental validity beyond traditional predictors (see Van Iddekinge et al., 2016 for an example using Facebook).

Finally, research should explore how hiring managers can more effectively use LinkedIn-based cybervetting. Existing studies have relied on untrained assessors (primarily students) evaluating personality traits without guidance or a structured assessment process (Roulin & Levashina, 2019; van de Ven et al., 2017). We agree with suggestions by Wilcox et al. (2022) and other researchers (e.g., Roth et al., 2016; Schroeder et al., 2020) that training programs and formal policies might be beneficial. Research could thus examine if a brief training intervention and/or the use of a structured LinkedIn assessment approach could help raters evaluate job seekers' personality, skills, or cognitive ability more accurately. For instance, training interventions could guide raters about which profile elements to focus on vs. ignore, or how to assess LinkedIn profiles when users provide incomplete information about themselves.

**In Conclusion: Should Practitioners Use LinkedIn to Cybervet?**

In the focal article, Wilcox et al. (2022) caution organizations against cybervetting because such practices lack validity, can be perceived as invading applicants' privacy, can lead

to negative reactions or lower organizational attractiveness, and adverse impact. Although we agree with them for personal social media, we believe that there is more potential when considering LinkedIn-based cybervetting. As noted above, LinkedIn-based cybervetting is more accepted by job seekers who create LinkedIn profiles for career-related reasons. LinkedIn profiles function like an extended and updated resume that can contain information useful for hiring decisions. There is evidence for accurate and somewhat-valid LinkedIn-based assessments of skills, personality traits, and cognitive ability, and such assessments are associated with less adverse impact than when using Facebook.

However, as Wilcox et al. (2022) mentioned, hiring managers who screen candidates' LinkedIn profiles still have access to information such as age, gender, and race. They should thus be instructed to disregard this information and instead focus on job-relevant information such as skills, experiences, or LinkedIn profile elements related to pertinent traits (e.g., extraversion or conscientiousness). We concur with Wilcox et al. (2022) that specific assessment policies and training programs should be developed to enhance cybervetting practices. For instance, just like training can help hiring managers better assess personality in job interviews (Powell & Bourdage, 2016), assessors could be trained to more accurately infer specific and observable personality traits (e.g., extraversion) based on valid and relevant LinkedIn profile content (e.g., summary, number of connections). While such training could be useful for hiring professionals, it could be especially essential for line managers who are less familiar with legal issues in employee assessment and selection (Roth et al., 2016).

# References

Aguado, D., Andrés, J. C., García Izquierdo, A. L., & Rodríguez, J. (2019). LinkedIn" Big Four": job performance validation in the ICT sector. *Journal of Work and Organizational Psychology*, *35*, 53-64. https://doi.org/10.5093/jwop2019a7

Anderson, N. (2022, February 3, 2022). Facebook loses users for the first time EVER. *The Daily Mail*. https://www.dailymail.co.uk/news/article-10471227/Facebook-loses-users-time-Zuckerberg-blames-TikTok-boom.html

Azucar, D., Marengo, D., & Settanni, M. (2018). Predicting the Big 5 personality traits from digital footprints on social media: A meta-analysis. *Personality and Individual Differences*, *124*, 150-159. https://doi.org/https://doi.org/10.1016/j.paid.2017.12.018

Cook, R., Jones-Chick, R., Roulin, N., & O'Rourke, K. (2020). Job seekers' attitudes toward cybervetting: Scale development, validation, and platform comparison. *International Journal of Selection and Assessment*. https://doi.org/10.1111/ijsa.12300

Cubrich, M., King, R. T., Mracek, D. L., Strong, J. M. G., Hassenkamp, K., Vaughn, D., & Dudley, N. M. (2021). Examining the criterion-related validity evidence of LinkedIn profile elements in an applied sample. *Computers in Human Behavior*, *120*, 106742. https://doi.org/10.1016/j.chb.2021.106742

Davis, J., Wolff, H.-G., Forret, M. L., & Sullivan, S. E. (2020). Networking via LinkedIn: An examination of usage and career benefits. *Journal of Vocational Behavior*, *118*, 103396. https://doi.org/10.1016/j.jvb.2020.103396

Fernandez, S., Stöcklin, M., Terrier, L., & Kim, S. (2021). Using available signals on LinkedIn for personality assessment. *Journal of Research in Personality*, *93*, 104122. https://doi.org/10.1016/j.jrp.2021.104122

Hartwell, C. J., & Campion, M. A. (2020). Getting social in selection: How social networking website content is perceived and used in hiring. *International Journal of Selection and Assessment*, *28*(1), 1-16. https://doi.org/10.1111/ijsa.12273

Kluemper, D. H., Rosen, P. A., & Mossholder, K. W. (2012). Social networking websites, personality ratings, and the organizational context: More than meets the eye? *Journal of Applied Social Psychology*, *42*(5), 1143-1172. https://doi.org/10.1111/j.1559-1816.2011.00881.x

Landers, R. N., & Marin, S. (2021). Theory and technology in organizational psychology: A review of technology integration paradigms and their effects on the validity of theory. *Annual Review of Organizational Psychology and Organizational Behavior*, *8*, 235-258. https://doi.org/10.1146/annurev-orgpsych-012420-060843

Mischel, W., Shoda, Y., & Mendoza-Denton, R. (2002). Situation-behavior profiles as a locus of consistency in personality. *Current Directions in Psychological Science*, *11*(2), 50-54. https://doi.org/10.1111/1467-8721.00166

Powell, D. M., & Bourdage, J. S. (2016). The detection of personality traits in employment interviews: Can "good judges" be trained? *Personality and Individual Differences*, *94*, 194-199. https://doi.org/https://doi.org/10.1016/j.paid.2016.01.009

Press-Reynoldd, K. (2021). Facebook wants to attract young people, but Gen Z teens say it's a 'boomer social network' made for 'old people'. *Insider*. https://www.insider.com/facebook-gen-z-teens-boomer-social-network-leaks-2021-10

Roth, P. L., Bobko, P., Van Iddekinge, C. H., & Thatcher, J. B. (2016). Social media in employee-selection-related decisions: A research agenda for uncharted territory. *Journal of Management*, *42*(1), 269-298. https://doi.org/10.1177/0149206313503018

Roulin, N., & Levashina, J. (2019). LinkedIn as a new selection method: Psychometric properties and assessment approach. *Personnel Psychology*, *72*(2), 187-211. https://doi.org/10.1111/peps.12296

Sackett, P. R., & Walmsley, P. T. (2014). Which personality attributes are most important in the workplace? *Perspectives on Psychological Science*, *9*(5), 538-551. https://doi.org/10.1177/1745691614543972

Schroeder, A. N., Odd, K. R., & Whitaker, J. H. (2020). Agree to disagree: Examining the psychometrics of cybervetting. *Journal of Managerial Psychology*. https://doi.org/10.1108/JMP-09-2018-0420

Shaffer, J. A., & Postlethwaite, B. E. (2012). A matter of context: A meta-analytic investigation of the relative validity of contextualized and noncontextualized personality measures. *Personnel Psychology*, *65*(3), 445-494. https://doi.org/https://doi.org/10.1111/j.1744-6570.2012.01250.x

Stoughton, J. W., Thompson, L. F., & Meade, A. W. (2015). Examining applicant reactions to the use of social networking websites in pre-employment screening. *Journal of Business and Psychology*, *30*(1), 73-88. https://doi.org/10.1007/s10869-013-9333-6

Tay, L., Woo, S. E., Hickman, L., & Saef, R. M. (2020). Psychometric and validity issues in machine learning approaches to personality assessment: A focus on social media text mining. *European Journal of Personality*. https://doi.org/https://doi.org/10.1002/per.2290

Utz, S. (2016). Is LinkedIn making you more successful? The informational benefits derived from public social media. *New Media & Society*, *18*(11), 2685-2702. https://doi.org/10.1177/1461444815604143

van de Ven, N., Bogaert, A., Serlie, A., Brandt Mark, J., & Denissen Jaap, J. A. (2017). Personality perception based on LinkedIn profiles. *Journal of Managerial Psychology*, *32*(6), 418-429. https://doi.org/10.1108/JMP-07-2016-0220

Van Iddekinge, C. H., Lanivich, S. E., Roth, P. L., & Junco, E. (2016). Social media for selection? Validity and adverse impact potential of a Facebook-based assessment. *Journal of Management*, *42*(7), 1811-1835. https://doi.org/10.1177/0149206313515524

Vinchur, A. J., Schippmann, J. S., Switzer III, F. S., & Roth, P. L. (1998). A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology*, *83*(4), 586-597. https://doi.org/10.1037/0021-9010.83.4.586

Wilcox, A., Damarin, A. K., & McDonald, S. (2022). Is cybervetting valuable? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *15*(3).

Zhang, L., Van Iddekinge, C. H., Arnold, J. D., Roth, P. L., Lievens, F., Lanivich, S. E., & Jordan, S. L. (2020). What's on job seekers' social media sites? A content analysis and effects of structure on recruiter judgments and predictive validity. *Journal of Applied Psychology*. https://doi.org/https://doi.org/10.1037/apl0000490

Zide, J., Elman, B., & Shahani-Denning, C. (2014). LinkedIn and recruitment: how profiles differ across occupations. *Employee Relations*, *36*(5), 583-604. https://doi.org/10.1108/ER-07-2013-0086

**Table 1. LinkedIn indicators examined in past studies**

| LinkedIn indicators | Study 1 | 2 | 3 | 4 | 5 | Correlations with Traits/Skills | Criterion validity |
|---|---|---|---|---|---|---|---|
| Presence of profile picture | X | X | | X | X | CO, E, GMA | |
| Smile in picture | | | X | | X | A | |
| Professional headshot | | X | X | X | X | | |
| Other ratings related to profile picture | | | | | X | A, E | X |
| Type of background picture | | X | X | | | E, O | |
| Number connections | X | | X | X | X | E, C, L, IS | |
| Number of sections filled in | X | | | | | | |
| Word count | | | | X | | C | |
| Profile updated | | | X | | | C | |
| Summary | | X | X | X | X | L, CO, CM, O, E, C, GMA | X |
| Number of companies worked for | X | | | | | | |
| Extent of experience | X | | | | | | |
| Multiple current roles | | X | | | | | |
| Detailed work experiences | X | X | X | X | | C, GMA | |
| Extracurricular activities | | | X | | | O, C, E | |
| Number of causes | X | | | | | - | |
| Additional pictures | | | X | | | C, E, ES | |
| Recommendations received | X | X | X | X | X | C | |
| Recommendations given | | X | X | | | E | |
| Awards | | X | X | | | C | |
| Grades/GPA | | | X | | | C | |
| Highest degree | | X | | | | - | |
| Additional training | X | | X | | | C | |
| List of courses | | | X | | | C | |
| Number of skills | X | | X | X | | E | |
| Number of endorsements | | | | X | | E, L, IS | |
| Presence of specific skills | | | X | | | A, C, E, O, ES | |
| Number of languages | X | | X | | | O | |
| Number of interests | X | | X | X | X | | |
| Number of groups | | X | | X | X | PL | |
| Employer listed in interests | | X | | | | | X |
| Number of indicators/elements | 21 | 14 | 33 | 10 | 19 | | |

*Note*. Study 1 = Aguado et al. (2019); Study 2 = Cubrich et al. (2021); Study 3 = Fernandez et al. (2021); Study 4 = Roulin & Levashina (2019); Study 5 = van de Ven et al. (2017). E = Extraversion; A = Agreeableness; C = Conscientiousness; O = Openness to experience; ES = Emotional Stability; GMA = General Mental Ability; L = Leadership; CO = Communication; CM = Conflict Management; IS = Information-Seeking; PL = Planning