Too early to call: What we do (not) know about the validity of cybervetting

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There is no doubt: Cybervetting is now recruiters’ everyday routine (Berkelaar & Buzzanell, 2015; Hartwell & Campion, 2020). Thus, we could not agree more with Wilcox et al. (2022) that it is important to address the considerable gap between cybervetting practice and research, especially concerning its validity. Their article is a wake-up call that most questions in this issue are still unanswered. We see the point of their distinct skepticism and agree that the validity of cybervetting is unproven. Nonetheless, we argue that this chapter needs a closer look before cybervetting is said to have “dubious effectiveness” (Wilcox et al., 2022, p. X), leads to “dampened productivity” (p. X), and “limits freedom of expression” (p. X). Although there is good reason to be cautious, we put into question whether cybervetting is an “unreflective activity undertaken by individual hiring agents within organizations that alternately ignore or encourage it” (p. X). Many researchers have warned about the risks of cybervetting early on (e.g., Brown & Vaughn, 2011; Caers & Castelyns, 2011; Davison et al., 2011); job candidates report intentions to withdraw applications (Schneider et al., 2015; Suen, 2018) and sue organizations (Stoughton et al., 2015) if cybervetting is used. Recruiters also report ambiguity about this practice (e.g., Hoek et al., 2016; McDonald et al., 2021; Pike et al., 2018). Rather than stakeholders “uncritically” (Wilcox et al., 2022, p. X) accepting cybervetting, we see a vivid debate. Social media (SM) platforms might be a modern, easily available, less faked, and economic source for first impressions of applicants’ traits, replacing traditional resumés (Davison et al., 2011; Landers & Schmidt, 2016)—if there is evidence for its validity. The debate started when Davison et al. (2011), Roth et al. (2016), and Landers and Schmidt (2016) provided mixed conclusions about cybervetting validity. Following, we shine a light on previous findings regarding cybervetting’s validity, deepen the still unknowns, and call for further action.

What we know so far about cybervetting validity: Is what you see what you get?

In their focal article, Wilcox et al. (2022) described what criteria recruiters are looking for when cybervetting: Recruiters attempt (a) to infer the applicant’s person–job (P–J) fit, (b) to infer the person–organization (P–O) fit (Hoek et al., 2016; Roulin & Bangerter, 2013), and (c) to screen for red flags (e.g., drug abuse; Hartwell & Campion, 2020; McDonald et al., 2021). We propose that...
cybervetting should be seen as a lens model in the sense of Brunswik (1952): Social media (SM) content serves as a lens through which recruiters seek to infer applicants’ characteristics (e.g., conscientiousness, professionalism). Based on this, they judge applicants’ P–J or P–O fit and decide which candidate(s) to pursue. Thus, SM content is used to observe P–J fit, P–O fit, and red flags, which, in turn, should predict performance.

According to Gosling et al. (2002), an observer’s accuracy—in this case referring to a recruiter’s judgment—hinges on cue validity (i.e., how a trait manifests in a cue, such as how conscientiousness manifests in a Facebook posting) and cue utilization (i.e., how a certain cue is used, such as whether a particular Facebook posting is used to evaluate conscientiousness). Thus, the validity of cybervetting depends on (a) whether a SM profile includes cues for P–J fit, P–O fit, and red flag behavior; (b) whether P–J, P–O fit, and red flags are valid criteria for predicting an applicant’s traits and performance; and (c) how each of these cues is used. It is clear what recruiters use cybervetting for and that these criteria are good starting points in evaluating applicants: P–J fit (knowledge, skills, and abilities) and P–O fit (values) are valid predictors of performance (Kristof-Brown et al., 2005). Accordingly, the cybervetting debate focuses on convergent validity (i.e., whether cybervetting judgments converge with established measures of these cues), criterion-related validity (i.e., whether cues from cybervetting judgments can predict performance), and risks for validity (reliability, biases).

### Convergent validity

Many studies have addressed the convergence of self-rated personality traits and SM-based ratings: Schroeder et al. (2020) pointed out that cybervetting judgments cannot replace established measures on the Big Five, nor could they adequately measure professionalism, written communication skills, and cognitive ability.

On the contrary, substantial correlations for the Big Five have been reported for personal blogs (Vazire & Gosling, 2004), Facebook profiles (e.g., Back et al., 2010), and LinkedIn profiles (Roulin & Levashina, 2019; Van de Ven et al., 2017). Two meta-analyses concluded that SM profiles contain substantial traces of one’s personality traits (Azucar et al., 2018; Settanni et al., 2018). One possible explanation for diverging findings was provided by Roulin and Levashina (2019) who found convergent validity only for visible skills and traits (e.g., extraversion, planning). Thus, we conclude that SM content might be able to provide convergence for certain (visible) traits or at least give a first impression of an applicant’s personality.

### Criterion-related validity

Performance-related validity of cybervetting remains a controversial issue: Kluemper et al. (2012) and Kluemper and Rosen (2009) found good performance-related validity of cybervetting. Roulin and Levashina (2019) found that LinkedIn judgments predict whether applicants obtain a job and get promoted. Aguado et al. (2019) reported that LinkedIn profiles predict productive hours and employees’ potential, but Cubrich et al. (2021; cybervetting on LinkedIn) and Van Iddekinge et al. (2016; cybervetting on Facebook) reported that cybervetting “correlate[s] essentially zero” (Van Iddekinge et al., 2016, p. 1832) with job performance. Furthermore, red flag postings were not able to predict counterproductive work behavior (but self-reported alcohol abuse; Becton, Walker, Schwager, et al., 2019). Then again, some LinkedIn profile features (e.g., length, number of connections) correlated with users’ personality traits (Fernandez et al., 2021; Roulin & Levashina, 2019). These contradictory findings provide no clear conclusion on criterion-related validity.
Reliability: A prerequisite for cybervetting validity

Roth et al. (2016) proposed that reliability might be an issue in cybervetting because the unstandardized content of SM profiles might lead to inaccurate assessments. Indeed, LinkedIn profile contents differ between occupations (sales vs. human resources vs. industrial-organizational [I-O] psychology; Zide et al., 2014). On the other hand, an analysis by Zhang et al. (2020) found that information on, for example, written communication skills, values, and education is equally present on most SM profiles.

Empirically, some cybervetting studies have reported good interrater agreement (e.g., Kluemper et al., 2012; Roulin & Levashina, 2019; Schroeder et al., 2020; Van de Ven et al., 2017), whereas others did not (e.g., Van Iddekinge et al., 2016; Zhang et al., 2020). Whereas more structured assessments improved reliability in the study by Roulin and Levashina (2019), other studies—namely those by Schroeder et al. (2020) and Zhang et al. (2020)—came to different conclusions: Again, we see that research disagrees. Nonetheless, reliability issues might lower validity estimates of cybervetting.

Biases as a danger to validity: Thinking, fast and wrong

We share the common worry that cybervetting gives recruiters access to more personal information, which could bias hiring decisions—and seriously affect validity. Several job-irrelevant details (e.g., an applicant’s political affiliation, religion, and sexuality) have been shown to influence the recruiters’ judgments even after a bias training (Hartwell & Campion, 2020; Roth et al., 2020; Zhang et al., 2020). Furthermore, biases also appear when recruiters view inappropriate content (drug abuse, partying, rude language; Becton, Walker, Gilstrap, et al., 2019; Tews et al., 2020), spelling mistakes, and text speak (Scott et al., 2014) and arise due to an applicant’s attractiveness (Carr et al., 2017). Concerning gender, contradictory to Wilcox et al.’s (2022) proposition, various studies unexpectedly found higher cybervetting ratings for women than for men (Becton, Walker, Gilstrap, et al., 2019; Roulin & Levashina, 2019; Van Iddekinge et al., 2016).

Wilcox et al. (2022) cautioned about stereotypes concerning what an ideal employee would look like, and Roth et al. (2016) suggested that this perfect candidate’s benchmark may be recruiters themselves: Similarity attraction could be the main mechanism recruiters use to judge applicants when personal information becomes available in cybervetting. That is, if the recruiter and applicant share similar views or preferences, this might lead to interpersonal attraction, which would result in positively biased hireability judgments (Roth et al., 2017). Two recent studies supported this bias for applicants’ political affiliation (Roth et al., 2020; Wade et al., 2020): Both studies found large effects of political similarity on cybervetting judgments, remarkably exceeding the effect of individuating information (e.g., grades, work experience). This gives initial evidence on the important role of similarity-attraction biases in cybervetting.

What we do not know so far: An updated research agenda

By now, we can conclude that (a) some evidence exists concerning convergent validity, (b) recruiters focus (at least partly) on valid criteria, but (c), overall, cybervetting’s validity remains controversial due to contradictory results, unclear reliability, and evidence on judgment biases. To make sense of this, one might take a closer look at moderator and mediator variables in these studies. Thus, in the following, we suggest starting points for future research questions to address the influences of methods, recruiters, job candidates, and context.

Toward more robust conclusions through research design

We see several opportunities to extend previous research designs. So far, many findings in cybervetting have relied on interviews (e.g., Berkelaar & Buzzanell, 2015; Hoek et al., 2016; McDonald
et al., 2021); although interviews are well-suited to explore new issues, we call for more studies that test the proposed hypotheses (see Davison et al., 2011; Landers & Schmidt, 2016; Roth et al., 2016; Wilcox et al., 2022). Only a few cybervetting studies have used experimental designs: As self-insight is limited, especially regarding judgment biases, it might be risky to rely on what recruiters believe they use to judge applicants in cybervetting. Rather, adopting experimental approaches (e.g., Becton, Walker, Gilstrap, et al., 2019; Roth et al., 2020) might be fruitful for shining a light on the mechanisms involved in cybervetting. Approaches using experimental test validation would add to common approaches by examining how cybervetting causally affects selection-related outcomes (see Krumm et al., 2019; Schäpers et al., 2020).

Furthermore, Roulin and Levashina (2019) stressed the importance of trait visibility in cybervetting’s validity. This might be a key to understanding the previous debate: Cybervetting is a rating by others (i.e., recruiters, supervisors) and, thus, depends on particular traits’ observability. Thus, the limited convergent validity of cybervetting might be due to the fundamentally different perspective between the self and others (Vazire, 2010). Thus, one might evaluate validity coefficients not only in comparison with self-ratings but also with valid other ratings in personnel selection (e.g., interviews, assessment center; see Liewens & Van Iddekinge, 2016).

Many cybervetting studies have focused on Big Five judgments. However, studies have shown that broad Big Five traits are not the best predictors of performance (Judge et al., 2013; Shaffer & Postlethwaite, 2012)—even if measured with self-reports. Rather, it might be promising to consider the symmetry principle between predictor and criterion (see Schulze et al., 2021), and focus on applicant characteristics that are more closely related to performance (e.g., contextualized traits, integrity, cognitive ability; Sackett et al., 2021). Although cybervetting judgments only show “low correlations” (Wilcox et al., 2022, p. X) to performance, the results, for example, by Kluemper et al. (2012), are not very different from validity coefficients that can be expected for the Big Five (see Sackett et al., 2021). This underlines how the cybervetting debate can draw from research in personnel selection (Liewens & Van Iddekinge, 2016).

Cybervetting studies could further improve their robustness by applying structural equation modeling to separate latent traits (e.g., Big Five, cognitive ability) from measurement error. In this context, we suggest that convergent validity could be approached using the established multitrait-multimethod correlation framework and, thereby, trait and method effects can be differentiated (Eid et al., 2008). Concerning recruiter effects (e.g., judgment biases) in cybervetting, studies should also consider multilevel analyses when they use nested designs—that is, when many applicant profiles are clustered in a few recruiters’ judgments.

**Investigating the role of recruiter characteristics in cybervetting**

Cybervetting depends on recruiters’ judgments. As shown by studies on judgment biases, recruiter’s attitudes and characteristics can play an important role in validity. However, recruiters’ decision processes in cybervetting have largely remained a black box (for first insights, see Hartwell & Campion, 2020). Influential factors in cybervetting judgments might be recruiters’ own use of SM platforms (Nikolaou, 2014), their sense of ethics (McDonald et al., 2021), and their perceptions of professionalism (Berkelaar & Buzzanell, 2015).

Addressing recruiter biases, many questions remain. For example, we mentioned above that similarity attraction might be a primary mechanism in cybervetting. Although only political affiliation has been tested so far (Roth et al., 2020; Wade et al., 2020), this bias might also be triggered by, for example, personality, values, and preferences (Byrne, 1997; Van Hoye & Turban, 2015). Likewise, demographic similarity biases (age, race, gender) have remained unaddressed. Researchers should also focus on developing effective training for recruiters against cybervetting biases, as previous attempts have failed (Schroeder et al., 2020; Zhang et al., 2020).
Investigating the role of applicant characteristics in cybervetting

Cybervetting’s cue validity depends on the SM content provided by applicants. Therefore, applicants’ attitudes and characteristics might influence cybervetting validity, too. For instance, Aguado et al. (2016), Cook et al. (2020), and Stoughton et al. (2015) reported distinct attitudes to cybervetting. How does skepticism toward cybervetting influence cybervetting validity? Based on feelings of surveillance (Duffy & Chan, 2019), applicants might increase their faking behavior, which, in turn, might decrease cybervetting’s validity (Guillory & Hancock, 2012; Schroeder & Cavanaugh, 2018). Finally, an applicant’s age and gender also seem to influence attitudes toward cybervetting (Aguado et al., 2016; Cook et al., 2020).

Maybe it depends: Context effects

Finally, in practice, every cybervetting procedure happens with respect to a specific job position and in a certain industry. Wilcox et al. (2022) pointed out the moderating effect of branches in cybervetting, and initial reports have also shown differences between cultures concerning SM use (Shields & Levashina, 2016) and cybervetting (El Ouirdi et al., 2016). Thus, we suggest that context effects should be tested in cybervetting, as cybervetting criteria might differ for a job position in, for instance, accounting versus management of a firm.

Overall, cybervetting studies have generally evaluated validity on either Facebook or LinkedIn. Although most studies have focused on Facebook, every SM platform has its unique content and implications (e.g., LinkedIn endorsements). For instance, applicants consider LinkedIn to be more job-related than other platforms (Aguado et al., 2016; Cook et al., 2020), and recruiters prefer LinkedIn for evaluating P–J fit but Facebook for judging personality (Hartwell & Campion, 2020; Roulin & Bangerter, 2013). Also, LinkedIn might provide more structure to cybervetting (Lievens & Van Iddekinge, 2016). Therefore, studies need to test the assumption of improved validity when using professional SM platforms for cybervetting. Finally, recruiters use multiple sources while cybervetting (Berkelaar & Buzzanell, 2015) in that they tend to combine impressions from, for example, Facebook and LinkedIn rather than relying on only one platform. Thus, future studies should extend their focus to joint validity of platforms as well as to additional platforms (e.g., Instagram, TikTok) to draw a comprehensive picture about cybervetting validity.

Conclusion

Is cybervetting valuable? We emphasize that one point to consider when answering this question is cybervetting’s validity. However, although previous validity studies have given initial valuable insights, they have also reported contradictory results, leaving many open questions. Thus, it is still too early to come to conclusions about cybervetting’s validity; to do so, we need to consider several more variables. Therefore, this controversy might be part of a new signal’s adaptation process (Bangerter et al., 2012; Roulin & Bangerter, 2013).

We share Wilcox et al.’s (2022) view that job candidates are not responsible for evaluating the accuracy of cybervetting; this is the responsibility of I-O psychology, specifically with respect to testing propositions empirically, addressing moderators as well as mediators, and informing practitioners about findings. Furthermore, we should take action fast (see White et al., 2022): Although cybervetting might be a rather new practice from a scientific point of view, it is not new to the organizations that do it. For that reason, above we offered suggestions on how to provide well-balanced conclusions about cybervetting. Now is the time to build on these first findings, and now is the time to echo the many calls for insights on cybervetting’s validity.
References


