



# The Relationship Between Team Diversity and Team Performance: Reconciling Promise and Reality Through a Comprehensive Meta-Analysis Registered Report

Lukas Wallrich<sup>1</sup> · Victoria Opara<sup>2</sup> · Miki Wesołowska<sup>3</sup> · Ditte Barnoth<sup>4</sup> · Sayeh Yousefi<sup>5</sup>

Accepted: 31 July 2024 / Published online: 29 August 2024

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2024

## Abstract

Workforce diversity is increasing across the globe, while organizations strive for equity and inclusion. Therefore, research has investigated how team diversity relates to performance. Despite clear arguments why diversity should enhance (some types of) performance, and promising findings in individual studies, meta-analyses have shown weak main effects. However, many meta-analyses have failed to distinguish situations where diversity should have a positive impact from those where its impact is more likely to be negative, leaving boundary conditions unclear. Here, we summarized the growing literature across disciplines, countries, and languages through a reproducible registered report meta-analysis on the relationship between diversity and team performance (615 reports, 2638 effect sizes). Overall, we found that the average linear relationships between demographic, job-related and cognitive diversity, and team performance are significant and positive, but insubstantial ( $|r| < .1$ ). Considering a wide range of moderators, we found few instances when correlations were substantial. However, context matters. Correlations were more positive when tasks were higher in complexity or required creativity and innovation, and when teams were working in contexts lower in collectivism and power distance. Contrary to expectations, the link between diversity and performance was not substantially influenced by teams' longevity or interdependence. The main results appear robust to publication bias. Further research is needed on how diversity climates and team cultures affect these relationships, and when there may be non-linear relationships—yet for the moment, promises of wide-spread performance increases may not be the strongest arguments to promote diversity initiatives. We discuss further implications for researchers and practitioners, and provide a web app to examine subsets of the data: [https://lukaswallrich.shinyapps.io/diversity\\_meta/](https://lukaswallrich.shinyapps.io/diversity_meta/).

**Keywords** Diversity · Team performance · Creativity · Problem-solving · Meta-analysis

## Introduction

In light of increasing workforce diversity (e.g., Tavernise & Gebeloff, 2021) and an increasing focus on teamwork within organizations (Cross et al., 2016), there has been a growing

interest in the relationship between diversity and team performance. Whether diverse teams outperform homogenous teams evidently does not change the moral and legal case for the creation of equal opportunities. However, an understanding of that relationship can inform diversity management and

---

✉ Lukas Wallrich  
l.wallrich@bbk.ac.uk

Victoria Opara  
v.opara@bathspa.ac.uk

Ditte Barnoth  
ditte.barnoth@uon.edu.au

Sayeh Yousefi  
s.yousefi@lse.ac.uk

<sup>1</sup> Birkbeck Business School, Birkbeck, University of London, London, UK

<sup>2</sup> Bath Business School, Bath Spa University, Bath, UK

<sup>3</sup> Faculty of Psychology, University of Warsaw, Warsaw, Poland

<sup>4</sup> School of Psychological Sciences, University of Newcastle, Callaghan, Australia

<sup>5</sup> Department of Psychological and Behavioural Science, The London School of Economics and Political Science, London, UK

staffing practices. Research into the diversity-performance nexus has been shaped by two competing theories: social identity theory (Tajfel et al., 1979) leads one to expect that diverse teams will experience more conflict, less cooperation, and thus reduced performance. Conversely, approaches that focus on cognitive resources posit that team diversity should increase performance by increasing the range of ideas and perspectives that are available to the group (e.g., Bohman, 2006; Page, 2019, though the idea dates back to John Stuart Mills and Aristotle).

Given these conflicting expectations, it is not surprising that empirical studies have obtained conflicting results. Some studies find clear benefits of diversity. For instance, in a field experiment where student teams started real companies, teams that were diverse in terms of their cognitive abilities outperformed those that were less diverse, regardless of the average level of cognitive ability (Hoogendoorn et al., 2017). However, other studies found negative relationships, for instance between ethnic diversity and the performance of public sector institution (Pitts & Jarry, 2009). Several meta-analyses have attempted to aggregate the evidence, and have generally found very weak links between diversity and performance (e.g., Bell et al., 2011; Horwitz & Horwitz, 2007; Triana et al., 2021). However, these meta-analyses suffer from conceptual and methodological limitations, which we discuss below. To set the context, though, we first delineate the key constructs of interest.

### Delineating Diversity

Diversity refers to differences between members of a collective on any particular characteristic. These characteristics include some that are easily observable (e.g., gender, ethnicity) and others that are less visible (e.g., personality traits, values). Some are stable (e.g., first degree), others change continuously (e.g., age). What is common to all of them, however, is that they are likely to have influenced the life experiences individuals have had, and that they will thus influence how individuals conceive of and approach any given task (Sulik et al., 2021).

For the purpose of this meta-analysis, we will group types of diversity into three broad dimensions, following van Dijk et al. (2012): demographic diversity (e.g., age, nationality), cognitive diversity (e.g., personality traits, education level), and job-related diversity (e.g., function, tenure), with a focus on the first two dimensions.<sup>1</sup>

<sup>1</sup> As any effects of job-related diversity are likely to be highly context- and task-specific, this dimension appears to be of limited theoretical interest. Nevertheless, it is the one that can most easily be influenced by HR and management practices. Therefore, the understanding of any consistent patterns in the evidence matters for practitioners and we include it here.

### Delineating Team Performance

More and more work in organizations is conducted by teams rather than individuals (Cross et al., 2016) and the performance of teams varies drastically—by one estimate, being part of a high-performing team can make team members five times as productive as they would be in an average team (S. Keller & Meaney, 2017). Teamwork in organizations aims at all kinds of outcomes, from simple production tasks on an assembly line to complex multi-stage problem-solving, for instance by executive teams. Therefore, team performance takes many shapes.

### Classifying Performance Tasks and Types

Performance tasks can be classified in a myriad of ways. When it comes to testing the relationship of performance with diversity, three aspects appear most relevant, as outlined in a recent review (Sulik et al., 2021): (a) the complexity of the task; (b) the question of whether creativity, and particularly divergent or convergent thinking is required; and (c) the level of interdependent cooperation that is required of the team members. Relatedly, team performance can take different shapes, including proximate measures such as productivity and creativity and more distant measures such as the financial performance of the product/unit managed by the team.

### Diversity and Performance: Theoretical Expectation

Theoretically, diversity might be predicted to enhance performance as it corresponds to greater collective cognitive resources. Team members that differ in their abilities, experiences, and attitudes evidently contribute more to the common “toolkit” than team members whose contributions largely overlap. They are thus more likely to be able to explore the full solution space and less likely to suffer from collective blind spots (Hong & Page, 2004). Similarly, they are likely to be more accurate in predictions, such as those of revenues or costs, because the aggregation of diverse estimates tends to reduce errors (Page, 2019; Sulik et al., 2021).

Conversely, diversity might dampen performance due to its potential link to intergroup divisions. This goes back to the foundations of social identity theory (Tajfel et al., 1979), according to which individuals seek to create a distinctive social identity for themselves and derive psychological benefits by striving for positive distinctiveness. This “ingroup love” then frequently leads to privileged treatment of and preferential attachment to others who share a common identity, which might result in communication barriers or even in open conflict within diverse teams. It

should be noted that some of these difficulties might not be all bad—in fact, some communication barriers have been suggested to improve the quality of deliberation as they require team members to articulate their hidden assumptions, which then enables their closer inspection (Phillips et al., 2009). However, intergroup tensions might also play out in less explicit ways, for instance when “ambient cultural disharmony” increases anxiety and reduces creativity (Chua, 2013).

Both accounts of the effects of diversity are based on ideas backed by strong evidence as well as common sense—so they each describe plausible pathways from team diversity to team performance. They are each more closely aligned with some dimensions of diversity than others: demographic diversity is particularly likely to trigger intergroup divisions, while cognitive diversity most immediately brings greater cognitive resources. However, demographic attributes are often closely associated with differences in lived experiences, which again results in greater collective cognitive resources. Conversely, cognitive attributes such as values can trigger social identity processes where “bird of a feather flock together” (Ertug et al., 2022). Therefore, our interest is less in the dimensions of diversity per se than in boundary conditions that shape the observed relationships between diversity and performance. Contextual factors concerning the team task, type, or setting are likely to influence the relationship between diversity and performance. Furthermore, regional, cultural, and methodological differences may matter, yet have been underexplored to date.

### Diversity and Performance: Heterogeneous Evidence

Even though popular business books (Syed, 2019) and management magazine articles (Rock & Grant, 2016) tout the promise of diverse teams, empirical findings are mixed. For many facets of diversity and performance, there are large studies that arrive at contrasting results. For instance, ethnic workforce diversity has been associated with better (Moon & Christensen, 2020) and worse (Pitts & Jarry, 2009) performance of US federal agencies. Given the plethora of studies, there is a need to both aggregate the evidence and to identify moderators that explain when positive/negative effects are likely to emerge.

### Existing Meta-Analytical Work and Its Limitations

Over the past two decades, various researchers have attempted to synthesize the burgeoning literature on diversity and team performance meta-analytically, as summarized in Table 1. Three key results emerge from that work: (1) any overall relationships between diversity and performance appear very small (i.e.,  $|r| < .1$ ); (2) while

job-related diversity tends to have positive associations with performance, demographic and cognitive diversity tend to have negative associations; and (3) effect sizes are highly heterogeneous.

In a context in which theory leads one to expect substantial effects, yet aggregate effects are small and heterogeneous, the focus of evidence aggregation should be on identifying boundary conditions, i.e., moderators (e.g., Moon & Christensen, 2020; Sulik et al., 2021; van Dijk et al., 2012). Knowledge about boundary conditions can help with evaluating and developing theory, shape future research, and inform diversity management practices. Accordingly, all previous analyses have considered moderation, yet the results suffer from two critical limitations. Firstly, many analyses test many potential moderators with low statistical power, which suggests that false positives and false negatives might well outnumber true discoveries. For instance, in the most recent comprehensive meta-analysis of the diversity-performance link, van Dijk et al. (2012) report tests of moderation based on a median number of effect sizes ( $k$ ) of 13. In Triana et al.’s (2021) meta-analysis, this median had increased to 22, though the tests did not concern team performance but rather specific hypothesized mediators. However, this indicates that evidence for better powered analyses is now available. Secondly, the meta-analyses to date tested moderators individually, and rarely reported associations between them. Testing multiple individual predictors of the size of an effect, without taking into account their association, would evidently never be acceptable in primary research. In the meta-analytic context, this could not have been done differently with the small datasets available to early meta-analyses, yet the development of meta-regression (Gonzalez-Mulé & Aguinis, 2018) and meta-decision tree (Li et al., 2020) techniques and the growth of the evidence base allows us to run more rigorous and informative analyses. This also allows for a consideration of changes over time, which are missing from extant meta-analyses, yet critical given that intergroup biases and the discourse around diversity in organizations and society more broadly have changed in recent decades (Charlesworth & Banaji, 2019; Ely & Thomas, 2020).

In considering boundary conditions, it is also important to consider the global reach of the evidence. Meta-analyses to date have focused on English language sources, and (while this is rarely explicitly reported) thus been dominated by WEIRD samples (Henrich et al., 2010), with the exception of one Chinese-language meta-analysis (Wei et al., 2015) that has largely been ignored by the English-language literature. Therefore, we lack evidence and transparency regarding the generalizability of results, which is critical for theory development and for practitioners working in a wide range of cultural contexts. We make use of rapidly improving machine translation tools (Jackson et al., 2019) to conduct searches in 13 major languages and thus base our analyses

Table 1 Meta-analyses to date

Reference	Scope/definitions		Results	
	Timespan, number of studies (N) & effect sizes (k)	Diversity	Performance	Main effects <sup>a</sup> / Moderators <sup>b</sup>
(Wallrich et al., current work) (2024)	1961–2023 N = 615 k = 2638	- demographic - job-related - cognitive	<i>Measure</i> : Objective v subjective <i>Type</i> : General performance Creativity & innovation Productivity	Task-related moderators Contextual moderators Methodological moderators
Triana et al. (2021)	1961–June 2019 N = 94 k = 280	Deep-level, i.e., personality, values, and culture	General performance (+ mediators: positive emergent states, positive team processes, team conflict)	Only reported for mediators. Stronger negative effects on <i>process</i> within executive teams
Wei et al. (2015) – in Chinese	1984–2014 N = 137 k = 345	Demographic diversity (separation, variety, or disparity)	Innovation performance General task performance	<i>Performance type</i> : stronger links with innovation performance <i>Culture</i> : more positive link in Eastern than Western countries <i>Team type</i> : More positive link for executive and R&D teams
van Dijk et al. (2012)	1989–2011 N = 146 k = 612	- demographic - job-related - deep-level	Objective Subjective (judged by member, internal team leader, external team leader)	Significant effects only for subjective performance measures (demographic: $-.05$ , job-related: $.04$ ). No sig. link with objective measures (poss. due to lower power) Strongest associations for rating by external leader, rather than team members More positive effect for innovation rather than in-role performance
Bell et al. (2011)	1980–2009 N = 92 k = 323	- task-related - bio-demographic (focus on conceptualization: separation, variety, or disparity)	General performance Creativity & innovation Efficiency	Negative link with gender and ethnicity, particularly for innovation, positive links with functional (and partly educational) background diversity. ( $r_s < -.1$ ) Team type: strongest positive effects for design and product development teams Site: lab studies show no links with gender/ethnicity, while field studies show clear negative link

**Table 1** (continued)

Reference	Scope/definitions		Results		
	Timespan, number of studies (N) & effect sizes (k)	Diversity	Performance	Main effects <sup>a</sup> / Moderators <sup>b</sup>	
Stahl et al. (2010)	1966–2006 k=108	Cultural diversity, measured at surface and deep-level, intra-nationally, and cross-nationally	General performance Creativity (+ process measures)	No significant link with performance ( $r = -.02$ ), positive link with creativity ( $r = .16$ )	No significant moderators of diversity-performance or diversity-creativity link found
Hülshager et al. (2009)	Until 2007 k=23 (for diversity-performance)	- job-relevant - demographic	- objective - self-rating - independent rating	Positive link with job-relevant diversity ( $\rho = .15$ ). Negative link with background diversity ( $\rho = -.13$ )	Measurement: Self-reported performance not linked to job-relevant diversity, in spite of positive links from objective measures and independent raters
Joshi and Roh (2009)	1992–2009 N=39 k=117	- relations-oriented (ethnicity, gender, or age) - task-oriented (education, functional background, or organizational tenure)	Various	No overall association ( $r = -.01$ ), but small significant negative association for relations-oriented ( $r = -.03$ ) and positive association for task-oriented diversity ( $r = .04$ )	More negative effect of gender and ethnic diversity in homogeneous sectors Also, more negative effect of relations-oriented diversity if teams are interdependent or together for the long rather than short term
Horwitz and Horwitz (2007)	1985–2006 N=35 k=78	- task-related - bio-demographic	Quality and quantity	Task related diversity predicts performance ( $r = .1$ ) Bio-demographic diversity n.s	Rater: Link with self-reported performance more positive than with manager-rated outcomes
Peeters et al. (2006)	1997–2003 k=28 (for variability) <sup>c</sup>	- Big Five personality traits	Various	Variety in agreeableness ( $\rho = -.12$ ) and conscientiousness ( $\rho = -.24$ ) predicts lower performance	Some small differences between student and professional teams, but main findings consistent
Webber and Donahue (2001)	1980–1999 N=24 k=45	- "less job-related diversity" - "highly job-related diversity"	Various (and cohesion as proximal outcome)	No significant relationships	No difference between top-management teams and lower-level teams
Bowers et al. (2000)	1961–1998 N=13 k=57	Ability, personality, and gender	Various	Ability, personality and gender diversity not significantly linked to performance	Task difficulty: homogenous teams outperform on "simple" tasks, diverse teams on "difficult" tasks Relatedly, homogenous teams outperform on production tasks low in cognitive demand

<sup>a</sup>  $\rho$  refers to true-score correlations after corrections for measurement error, which are reported where available

<sup>b</sup> Only selected significant moderators are included here. Many others were tested, but due to the low power for almost all tests, null results are uninterpretable. Conversely, non-null results, which are not corrected for multiple comparisons, are likely to have very high false-positive rates

<sup>c</sup> This paper addressed a wide range of factors that might explain team performance across a total of 104 studies. However, only a small fraction of them included measures of variability/diversity

on a broader, more diverse, and more inclusive evidence base.

Conceptually, meta-analyses to date averaged across *subjective* (i.e., self-reported) and *objective* measures of performance. Van Dijk et al. (2012) suggested that this may distort result and argued that subjective ratings should only be deemed valid indicators of performance if tight conditions are met. Nevertheless, their subsequent analyses of moderators, as well as all other evidence syntheses, are dominated by effect sizes based on self-reports, so that we know little about the link between diversity and objective measures of performance, and nothing about moderators of *that* link. While our analyses also include subjective measures, for a range of reasons discussed below, we report on their robustness to the inclusion of objective measures only, and test for differences between objective and subjective measures in a more rigorous way.

When it comes to effect size estimates, in line with most research, past meta-analyses relied on null-hypothesis significance testing to determine whether we have reason to believe that the association between diversity and performance is non-zero. However, that question appears to be of limited relevance to researchers and practitioners alike. Equivalence tests are an approach that is growing in popularity because it allows to test whether we have reason to believe that an association is substantial or insubstantial—or whether the evidence is still inconclusive (Lakens et al., 2018). This can allow for more nuanced conclusions, particularly where estimates are small or not significant, and thus forms our focus here.

Finally, most meta-analyses to date do not offer a rigorous treatment of publication bias. This is often insufficiently explored in organizational psychology (Siegel et al., 2021), even though substantial bias is present in at least some sub-fields (O’Boyle et al., 2014) and can skew results. This is comprehensively assessed here, in line with methodological research that highlights the need for triangulation between different methods (Rodgers & Pustejovsky, 2021). Similarly, we consider a range of methodological moderators that yield insights into the robustness of the evidence, shed light on the viability of specific theories, and highlight directions for future research.

## The Present Research

We conducted a comprehensive meta-analysis to test the link between team diversity and performance. In that, we focused on identifying moderators that shape the link between the key dimensions of diversity (demographic, cognitive, and job-related) and team performance. Throughout, we did not merely focus on the statistical significance of effects—instead, we used equivalence tests to identify where there is evidence for a substantial association or evidence for *the*

*lack of* a substantial association, and where the evidence is inconclusive (Lakens et al., 2018).<sup>2</sup> The analysis was guided by four research questions, each giving rise to some specific hypotheses:

### RQ 1

Does team diversity predict team performance? How does this differ between the dimensions of diversity and the performance task under consideration?

In line with previous literature, we expected weak main effects of diversity on team performance on all three dimensions, yet through equivalence testing, we can determine whether this constitutes evidence for the absence of a substantial (rather than statistically significant) association. Therefore, we initially ask:

**RQ1a** Is the link between diversity and team performance insubstantial (i.e.,  $|r| < .1$ )? Does this differ between the dimensions of diversity?

In any case, we expected substantial heterogeneity, and hypothesize that this can partly be explained by characteristics of the performance task, primarily by its complexity, the required degree of interdependence and the importance of creativity, and particularly of divergence rather than convergence.

Regarding task complexity, it appears self-evident that more complex tasks rely more heavily on a group’s cognitive resources. Given that the benefits of diversity are expected to come about because of the greater collective cognitive resources it brings (Page, 2019; Sulik et al., 2021), we hypothesize that:

**H1** Diversity has a substantial positive association with performance when the task is high in complexity.

While this appears particularly pertinent to the dimension of cognitive diversity, we expect this to hold over the three dimensions we consider.

Regarding interdependence, the theoretical expectations are less clear. Complementary cognitive resources (e.g., skills) might be particularly beneficial when team members work interdependently, while identity conflicts that raise

<sup>2</sup> For that, we need to define the smallest effect size of interest (SESOI). This is inevitably subjective (and often left implicit), but we believe that the main effects of diversity on team performance are only of interest if they explain more than 1% of variance in team performance, i.e., when  $|r| > .1$ . Moderators, conversely, are only of substantial interest when they explain at least 5% of the (between-studies) heterogeneity in effect sizes, i.e., when  $\Delta R^2_{\text{Meta}} > .05$ . Readers might disagree, and a supplementary online app will allow them to rerun the analyses with their own SESOI.

communication barriers might be particularly harmful in such situations. However, in line with the contact hypothesis (Allport, 1954), the interactions that interdependence requires might improve intergroup attitudes. Indeed, while individual studies have suggested that interdependence harms the performance of demographically diverse teams (e.g., Timmerman, 2000), findings of a (small) meta-analysis suggest that interdependence improves the relationship between team diversity and team members' performance (Guillaume et al., 2012).<sup>3</sup> Therefore, we hypothesize that across all dimensions:

**H2** Diversity has a more positive association with team performance when the task requires a high level of interdependence.

Furthermore, the success criterion (determined by the type of task) matters. Informational benefits of diversity are only likely to matter when a task requires some creativity or problem solving (Sulik et al., 2021). There is no reason to expect that diversity per se would have any positive impact on pure production tasks, where both the output and the strategy are well defined. Therefore, we hypothesize that:

**H3a** Diversity has a more negative link to performance in tasks that focus on maximizing production of an output with a pre-defined strategy.

Conversely, where creativity or problem-solving are required, the benefits of diversity are likely to be most pronounced when divergent thinking is needed, i.e., when the multitude and variety of ideas is of paramount importance. Conversely, conflicts are most likely to arise when convergence on a single best idea is needed, as different values and perspectives might result in conflicting evaluations (Page, 2019). Furthermore, convergence requires that team members effectively build on each other's contributions, which has been found to be negatively associated with diversity because cognitive diversity makes knowledge integration more challenging (Harvey, 2013). Therefore, we hypothesize that:

**H3b** Diversity has a more positive link to performance in tasks where performance depends on creative divergence rather than convergence.

The second overarching research question concerned the macro-level context, where we asked:

## RQ2

How does the relationship between diversity and performance differ across space and time?

Apart from Wei et al. (2015), meta-analyses and reviews to date rarely considered space, and none explicitly considered time. This limits our understanding regarding the generalizability of any findings. Therefore, we report on the association between diversity and performance for each world region. To begin to understand drivers of the expected differences, we ask:

**RQ2a** Is the relationship between team diversity and performance related to a country's level of collectivism versus individualism?

Theoretically, this association might be expected to go either way. The presence of distinct identities might lead to greater conflict, and thus to reduced performance, where team cohesion is prioritized. Conversely, a focus on team cohesion might weaken the import of individual identities, and thus enable the effective use of cognitive resources. We are not aware of research that assessed this relationship in an intercultural context, so that we refrain from making a directional hypothesis.

Regarding time, we note that demographically based intergroup bias has broadly declined, for instance when it comes to race, skin tone, and sexual orientation in the USA (Charlesworth & Banaji, 2019), or to women's participation in the workplace across a range of countries (Charlesworth & Banaji, 2021). Similarly, diversity management has become widespread, aiming (among other purposes) to create conditions under which diversity contributes to performance (Köllen, 2021). Together, these developments lead us to hypothesize that:

**H4a** The relationship between diversity (particularly demographic diversity) and team performance has become more positive over time.

Given this hypothesis, it appears likely that the main effects of the different dimensions of diversity have become positive. Therefore, we expect that:

**H4b** The relationship between diversity and team performance is positive and substantial (i.e.,  $r > .1$ ) in evidence from the past decade (2012–2022).

## RQ3

How do contextual factors influence the relationship of diversity with team performance?

In addition to the nature of the performance task, characteristics describing the team and its setting are also

<sup>3</sup> This meta-analysis focused on the effects of team diversity on the performance and experience of individual employees, so that their evidence base and our evidence base are entirely distinct (unless studies report effects at both levels). Therefore, it is not included in Table 1.

likely to shape the link between diversity and performance. Here, we consider both variables describing the culture of the team (i.e., diversity climate, psychological safety, and authority differentiation) as well as those determined by the organization (i.e., teams' longevity and virtuality).

### Diversity Climate

The potential benefits of diversity are only likely to be realized when team members are willing to bring their unique perspectives to the table and when others are willing to learn from them (Ely & Thomas, 2001). This appears to be more likely in an organizational culture that explicitly values diversity, i.e., that has a positive diversity climate (Goyal & Shrivastava, 2013). Accordingly, individual studies have suggested that a positive diversity climate improves the association between team diversity and performance (e.g., Kadam et al., 2020; Moon & Christensen, 2020), yet this has not been tested meta-analytically. Therefore, we hypothesize that:

**H5** Diversity has a more positive link to performance when the team works in a context that has a positive diversity climate.

### Psychological Safety

When individual team members do not dare to engage in counter-stereotypical behaviors, identity-based conflict is exacerbated and the potential for cognitive benefits reduced. A recent review of the dynamics within diverse teams has suggested that stereotyping processes such as this might explain the mixed and somewhat disappointing results in the diversity literature (van Dijk et al., 2017). While stereotyping has rarely been measured in team diversity research and can thus not yet be meta-analyzed, van Dijk et al. (2017) proposed that psychological safety might make it easier for team members facing stereotypes to act in counter-stereotypical ways, and thus improve the association of diversity with team performance. Furthermore, psychological safety is a key predictor of team performance per se (Newman et al., 2017). Therefore, it appears valuable to assess how it interacts with diversity. Individual studies appear to point in a positive direction, for instance finding that psychological safety improves the link between nationality diversity and performance (Kirkman et al., 2013) or the link between team cognitive diversity and innovation (Cho, 2022), even though some studies yield mixed results (Martins et al., 2013). Therefore, we hypothesize that:

**H6** Diversity has a more positive link to performance when teams experience high levels of psychological safety.

### Authority Differentiation

Decision-making power can be variously distributed within a team. In the case of high authority differentiation, some team members have the authority to make decisions on behalf of their team, while low authority differentiation corresponds to more consensual decision making (Hollenbeck et al., 2012). Based on the finding that authority differentiation increases the importance of trust in teams (De Jong et al., 2016), and the common finding that trust is harder to build in diverse teams (Ertug et al., 2022), we hypothesize that:

**H7** Diversity has a more positive link to performance when the team is low in authority differentiation than when it is high in authority differentiation.

### Team Virtuality

Given the recent rise of remote and hybrid working, possible effects of team virtuality need to be considered. Team virtuality is here understood as the degree to which face-to-face collaboration is restricted because team members work in different places or at different times (De Jong et al., 2016). Evidently, teams higher in virtuality need to place greater reliance on communication methods that limit the transmission of non-verbal cues, which can increase communication difficulties (Miles & Hollenbeck, 2013). Such difficulties might be expected to both exacerbate identity conflict and reduce the benefit of the combination of diverse cognitive resources. Likely for the same reason, it has been shown that trust is particularly important in virtual teams (Breuer et al., 2016), which is (at least initially) harder to build in diverse teams due to homophily (Ertug et al., 2022). Conversely, it has been suggested that the more limited range of cues communicated virtually might decrease social categorization and thus identity-based conflict (Staples & Zhao, 2006), thus weakening this negative pathway. Accordingly, a small-scale meta-analysis found that team dispersion was associated with *less* conflict and *greater* social integration in diverse teams (Stahl et al., 2010). However, due to the limited sample, they could not test for a link with performance. Considering these contradictions, we ask:

**RQ3a** How does the link between diversity and performance differ depending on teams' level of virtuality?

### Longevity of the Team

Given that diversity might trigger identity conflicts, it appears likely that the link to performance depends on the longevity of the team. However, the direction of that relationship is unclear: short-lived teams might be better suited to focus on harnessing the diverse cognitive resources while



ignoring demographic fault lines, which become more problematic in longer-lived teams (Joshi & Roh, 2009). Fault lines may even only emerge after process failures occurred for unrelated reasons which are then attributed to demographic differences (Srikanth et al., 2016). Conversely, long-lived teams might have more opportunities to interact, get to know the individuals beyond the stereotypes, and thus to reduce intensity of intergroup conflict and thereby the negative effects of diversity (Choi & Jarrott, 2021). Correspondingly, the empirical evidence has been mixed, with some studies finding negative effects of team longevity (e.g., Boerner et al., 2011; Schippers et al., 2003), others finding positive effects (e.g., Kearney et al., 2009; Pelled et al., 1999), and some finding no relationship (Kearney & Gebert, 2009). Therefore, we ask:

**RQ3b** How does the link between diversity and performance differ depending on the longevity of a team?

#### RQ4

How do methodological choices influence the relationship of diversity with team performance?

In order to understand the state of the evidence, to identify potential limitations on its reliability and to inform future research, we test whether important methodological factors influence the observed effect sizes. In that, we consider the effect of measurement choices. Regarding the measurement of performance, a key decision is whether performance is measured objectively (e.g., as the winning percentage of sports teams, Timmerman, 2000) or subjectively, by asking team members (e.g., Liao & Long, 2016) or their supervisors (e.g., Kearney et al., 2009) to rate their performance. Objective measures might be influenced less by (positive and negative) expectations regarding the effects of team diversity and, accordingly, one meta-analysis has found that their relationships with team performance are weaker (van Dijk et al., 2012). However, another meta-analysis found stronger relationships between objectively measured performance and job-related diversity (Hülsheger et al., 2009), which is in line with the suggestion that diverse teams underestimate their performance due to the (productive) friction they encounter (Phillips et al., 2009). However, objective measures are easier to implement for some types of performance, so that an exclusive focus on objective measures (or a simple subgroup comparison between subjective and objective measures) would ignore that, e.g., productivity is more likely to be measured objectively and creativity to be measured subjectively. Therefore, we do not restrict the analyses to objective measures, and believe that any impact of measurement choices can only be meaningfully assessed when controlling for the type of performance. Since this has not

been done to date, we refrain from stating a directional hypothesis. Instead, we ask:

**RQ4a** How does the link between diversity and performance differ depending on whether performance is rated subjectively or measured objectively?

Regarding the measurement of diversity, we deem it important to distinguish measures that focus on variety from those that measure separation, as they reflect different theoretical emphases (Harrison & Klein, 2007).<sup>4</sup> Variety might be operationalized as the number of categories (on categorical variables) or the range (on numerical variables) present within the team, while separation also considers the distance between team members, conceptualized as the relative share of categorical groups, or the standard deviation on a numerical variable. Theoretically, one might expect that variety more closely predicts the breadth of collective cognitive resources, while separation more closely predicts the potential for the emergence of fault lines within the team. Correspondingly, Bell et al.'s (2011) meta-analysis found that job-related diversity as variety had a more positive relationship with performance than diversity as separation did, which Wei et al.'s meta-analysis (2015) confirmed across diversity dimensions. Therefore, we predict that:

**H8** Diversity will have more positive associations with performance where it is measured as variety rather than separation.

Furthermore, we look for indications of effect size inflation. These might arise because publication bias is prevalent in economics (Andrews & Kasy, 2019), social psychology (Lovakov & Agadullina, 2021), and organizational psychology (O'Boyle et al., 2014), and it appears likely that questionable research practices that inflate effect sizes are used with some regularity (Kepes et al., 2022). Similarly, at least the field of social psychology is made up largely of politically progressive researchers, who might be motivated to find and highlight positive effects of diversity, and thus fall prey to confirmation bias and related processes (Duarte et al., 2015). Given that these pressures are most likely to apply to the main hypotheses in a paper, we hypothesize that:

**H9** Studies where the link between diversity and performance is the focal hypothesis will report larger (H8a) and more positive (H8b) effect sizes than studies where this is an auxiliary or descriptive result.

<sup>4</sup> We list this as a methodological rather than substantive moderator since researchers rarely justify their choice to measure diversity as variety (e.g., range) or separation (e.g., standard deviation). Evidently, the result can both inform research practice and the interpretation of results.

To further understand the potential impact of publication bias, we will also test for differences in effect sizes between published and unpublished studies, in addition to dedicated analyses assessing the presence of publication bias outlined in the methods. Given that only experimental and quasi-experimental research can yield evidence for a causal relationship of diversity with performance, we will compare the effect sizes obtained from observational, quasi-experimental, and experimental studies. Their divergence, if any, can help inform both the interpretation of results and the shape of future research.

As an exploratory analysis related to the assessment of the evidence base, we will test whether the number of citations of an article is correlated with its effect size and with its level of significance. Seeing citations as an indicator of the visibility of evidence within the scientific community, the former would indicate that the evidence is seen as more positive than it is, while the latter would indicate that the evidence is seen as less uncertain than it is.

### Coding of Moderators and Additional Analyses

In addition to the moderators discussed so far (summarized in Table 2), we coded the specific types of diversity (e.g., race/ethnicity, function, values) and report their associations with effect sizes whenever there were at least five observations per cell. We also coded further exploratory moderators that were identified during the literature search and report on their relationship with the observed effect sizes in the section on exploratory analyses.

## Methods

### Open Science and Disclosures

Recent analyses have highlighted that too many meta-analyses are not reproducible (Polanin et al., 2020) and that a lack of pre-registration affords researchers high degrees of freedom that can inflate the false discovery rate (Gelman & Loken, 2014). Therefore, we chose the path of a registered report to increase transparency and robustness, building on a template by Fillon and Feldman (2021), and follow the APA JARS reporting standards throughout (Appelbaum, 2018). We also make all data and analysis code available, so that others can reproduce and build on our work, particularly when it comes to extending and updating the evidence base (Lakens et al., 2016). In addition, we provide a web app that allows readers to explore

the impact of changes to inclusion/exclusion criteria and model specifications, and to rerun analyses with updated data.

We share all procedures, materials, datasets, and analysis code on the Open Science Foundation (<https://osf.io/hpsz8>), and in Supplementary Materials ([https://lukaswallrich.github.io/diversity\\_meta/](https://lukaswallrich.github.io/diversity_meta/)). Systematic data collection did not begin prior to the acceptance of the registered report. There are no other unreported or unlinked pre-registrations for this meta-analysis project.

### Eligibility Criteria

Studies reporting associations between team diversity and team-level performance were included in our analysis if they were accessible to our searches concluded on 20/01/2023. In that, we included studies that addressed diversity in terms of demographic, cognitive, or job-related factors. We restricted our focus to studies that reported performance measures at the team level, except for studies concerning top-management teams, where we included studies that correlated their diversity with organizational performance. We excluded studies that purely considered diversity as disparity (e.g., status, authority, salary), or that only included outcomes that reflect team processes rather than performance (e.g., satisfaction, retention). Furthermore, we excluded studies concerned with perceived rather than measured diversity and with median team sizes below 3 (as dyads constitute an interpersonal rather than intergroup context) or above 25 (as the members of such “teams” are unlikely to be able to personally interact with each other on a regular basis, cf. van Dijk et al., 2012, who used the same team size criteria).

Because we were interested in the impact of diversity within teams in the workplace, we excluded any studies that used student samples, unless their performance measures were clearly organizational (e.g., the performance of student-led start-ups). Furthermore, we excluded any studies that did not report sufficient data to extract or calculate Pearson's  $r$  and the sample size and where the authors did not provide either these details or the raw data upon request.

Lastly, retracted studies pose a challenge for meta-analyses that is too often overlooked (Fanelli et al., 2021). Given that we include unpublished manuscripts in the meta-analysis and that some retractions are due to factors that do not raise doubts about the reliability of the descriptive statistics, we did not exclude all retracted studies. However, we excluded any studies that were retracted due to concerns with the data and report the impact of the remaining retracted studies on our conclusions in the section on robustness checks.

**Table 2** Hypothesized moderators and their levels

Moderator	Coding/levels
Diversity dimension (further sub-categories may be added during coding)	Demographic (age, gender, race/ethnicity, nationality, sexuality) Cognitive (educational level, degree, values, personality, intelligence, neurodiversity <sup>a</sup> ) Job-related (function, tenure)
Time	Year of data collection (if reported), otherwise year of publication
Task complexity	High/medium/low
Interdependence	High/medium/low
Country <sup>b</sup>	Country (+ multinational)
Success criterion	Divergence (e.g., many ideas)/convergence (e.g., best idea)/production (of pre-defined product)/other
Diversity climate	Positive (> midpoint on measurement scale <i>or</i> experimentally induced) Negative (< midpoint on measurement scale <i>or</i> experimentally induced) Not reported
Psychological safety	High (> midpoint on measurement scale <i>or</i> experimentally induced) Low (< midpoint on measurement scale <i>or</i> experimentally induced) Not reported
Authority differentiation	High/mixed/low
Team longevity	Unit best describing lifespan of team until performance was measured: hours/days/weeks/months or years
Team virtuality	Virtual (i.e., no routine face-to-face interaction) Hybrid-work (i.e., alternating virtual and physical interaction, with $\geq 20\%$ each) Hybrid-members (i.e., some team members are co-located, others fully remote) Physical (i.e., co-located, with routine face-to-face interaction)
Diversity measure	Variety/separation/other
Performance measure	Objective/subjective (by team members)/subjective (by team leader)/subjective (by external rater)
Study design	Observational/experimental/quasi-experimental <sup>c</sup>
Article focus	Is link between diversity and performance: focal hypothesis/auxiliary hypothesis/descriptive result
Citation count	Retrieved from Google Scholar (as no other sources covers all included languages)

<sup>a</sup>Neurodiversity evidently spans across the demographic and cognitive dimensions. Therefore, we planned to run all analyses without effect sizes concerning neurodiversity and report on any differences as robustness checks—yet we found no literature linking neurodiversity with team performance

<sup>b</sup>Countries' levels of individualism vs collectivism were then taken from Hofstede's cultural dimensions data matrix (Hofstede, 2015)

<sup>c</sup>The quasi-experimental category encompasses any techniques that lack randomization but aim to estimate causal effects, such as difference-in-differences, propensity-score matching, and related approaches

## Search Strategy

### Database Searches

To identify articles that were potentially relevant to our topic of investigation, we searched the most relevant electronic databases, namely PsycInfo, Business Source Premier, and Google Scholar (the most comprehensive source in the Social Sciences and in Management, Martín-Martín et al., 2021). To include further unpublished literature, we accessed OpenDissertations, NDLTD, and the Social Sciences Research Network (SSRN). The use of Google Scholar poses some special challenges; details on our search strategy there are included in SM 1a.

For team diversity, we used the following keywords: *diverse*, *diversity*, *heterogeneous*, *heterogeneity*, *individual differences*, and *team composition*. For team performance, the keywords were *performance*, *productivity*, *creativity*, *innovation*, and *effectiveness*. Finally, we included *team*

*or group*.<sup>5</sup> In order to move beyond the English-language evidence, we ran translated searches on Google Scholar in 12 additional languages, namely Chinese, Japanese, Korean, Indonesian, German, French, Spanish, Italian, Portuguese, Polish, Russian, and Ukrainian. Since there appears to be no data on publication languages for social science research, these were based on the intersection of the languages included in the Google Scholar Metrics (since this appears to indicate substantial coverage of that language) and the top 10 languages found with our search string in PsycInfo and Business Source Premier. Details and translated search strings can be found in SM 1.

<sup>5</sup> Therefore, the following search pattern was our main string: (*diverse OR diversity OR heterogenous OR heterogeneity OR "team composition" OR "individual differences"*) AND (*team OR group*) AND (*performance OR creativity OR productivity OR innovation OR effectiveness*).

## Further Searches

We also extracted all articles included in previous meta-analyses on the diversity-performance link and related questions (Bell et al., 2011; Bowers et al., 2000; Bui et al., 2019; Horwitz & Horwitz, 2007; Hülshager et al., 2009; Joshi & Roh, 2009; Peeters et al., 2006; Stahl et al., 2010; Triana et al., 2021; van Dijk et al., 2012; Webber & Donahue, 2001; Wei et al., 2015), as well as those cited in narrative reviews (Bunderson & Van der Vegt, 2018; Sulik et al., 2021; Williams & O'Reilly, 1998; Yadav & Lenka, 2020). Then, we extracted the reference lists of all articles selected for inclusion (using GROBID, 2008), as well as all articles citing one of the previous meta-analyses (using both Scopus and OpenCitations). Finally, we systematically contacted the 579 authors of the articles identified for inclusion to ask for further sources, particularly unpublished ones, and issued a call for unpublished findings on Twitter and Mastodon to find further relevant data.

## Screening of Studies

All results were exported from the respective databases and loaded into R, using a largely automated retrieval process (described in the analysis code, C1). They were then deduplicated using the ASySD package (Hair, 2021), which shows best-in-class performance based on our benchmark (SM 1B) against the results of a recent review (McKeown & Mir, 2021). The results from searches in other languages were automatically translated using the Google Translate API.

After deduplication, the screening of results took place based on title and abstract using an approach assisted by machine-learning in the *ASReview* software. By dynamically sorting results based on their similarity to results included so far, it achieves 100% recall after screening between 7.4 and 58.6% of records based on simulation studies (van de Schoot et al., 2021). We used this to initially screen 25% of records and then continued for as long as at least 1 in 50 was included for full-text screening (this should result in at least 98% recall at substantial time saving). After screening the search results, we used the same approach to screen the references contained in the articles identified for inclusion. Given that machine translations might result in substantially different terminology, we conducted this process separately for each language. The percentage of articles screened manually was 27.7% in English and ranged from 25.3 to 42.6% for the remaining languages.

In the final step, the “Methods” and “Results” sections, as well as tables and figures of the candidate article identified in the previous steps, are screened to decide on inclusion. The PRISMA flow diagram summarizing the process can be found in Fig. 1; the articles included in the meta-analysis can be found in the reference list where they are marked with

an asterisk. The full list of articles (after deduplication) that were screened can be found in the Supplementary Materials. In total, we found 70,327 records before deduplication, representing an estimated 50,000 unique sources,<sup>6</sup> out of which 615 were eligible for inclusion.

## Coding

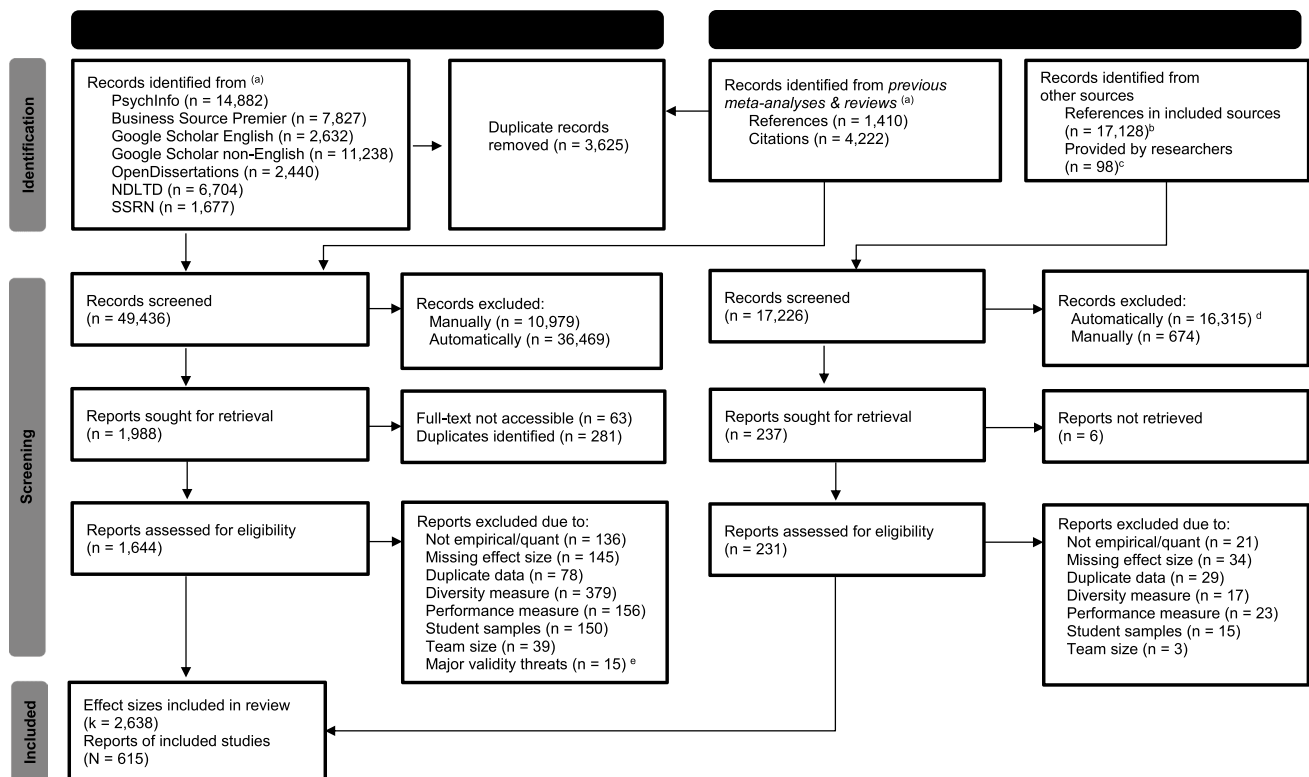
Data extraction from the included studies was conducted on the final pass of the screening process. For each study, all available correlations between team diversity and measures of performance were extracted, as well as details on the measures for diversity and performance, their reliabilities, the sample size, and all candidate moderators.

Initially, 25 studies were coded by both authors; any discrepancies were resolved through discussion and used to clarify the coding sheet. Then, both authors coded an additional 20% of all studies. We registered that if overall agreement was found to be below 95% and agreement on the coding of any moderator below 80%, all studies were double-coded, either entirely or with regard to the affected moderators. Otherwise, author 2 would complete the remaining coding. All authors hold graduate degrees in social psychology or social research, and have considerable experience in reading, reviewing, and conducting research.

## Coding of the Moderators

Moderators were coded based on the categories listed in Table 2. In the case of task complexity and task interdependence, we followed the coding rules used by Kleingeld et al. (2011). For *task complexity*, we relied on forming analogies between the performance tasks to Wood's (1986) task complexity scale for individual tasks. *Low* complexity referred to tasks that succeeded based on criteria such as reaction time or brainstorming output. *Medium* complexity referred to more demanding tasks, such as anagrams or sewing machine work. Finally, *high* complexity, finally, referred to more specialized tasks, such as technical work, or scientific tasks. For *task interdependence*, we classed tasks in which performance was pooled or sequential as *low*, where it was reciprocal (i.e., involved turn-taking) as *medium* and those where interaction was more intensive as *high* in interdependence. Examples for these levels are included in SM 1E.

<sup>6</sup> The registered approach to automated deduplication identified only 3,625 duplicates. However, manual deduplication of the entries selected for full-text screening suggested that an additional 14.1% of records retrieved from databases may be duplicated. When it comes to backwards citations, the share of duplicates that could not be identified automatically is likely to be higher due to the limited consistency of data extraction, so that we estimate that approximately 25% of the original results will have been duplicated.



<sup>a</sup> After internal duplication within the listed data sources. <sup>b</sup> After automatic deduplication within these references, and with the databases. However, poorer data quality here implies that a larger share of duplicates remains, only to be identified after the screening. <sup>c</sup> After deduplication (done continuously as articles were submitted). Includes 78 sources (mostly in Chinese) shared by the authors of a recent Chinese meta-analysis (C. Ma et al., 2022). <sup>d</sup> This screening process is detailed in SM 1C. In short: abstracts were added to records in as far as possible, then duplicate title-abstracts were treated as duplicates (due to inconsistent author extraction, resulting in 957 exclusions). Then we automatically screened the remaining entries using GPT 3.5 and running the original search query against them. <sup>e</sup> Mostly due to diversity measures that are very closely related to team size (e.g., counts of categories in teams of widely varying sizes) or to selective reporting, where reports state that only the significant relationships were reported. For details, see coding sheet (SM 1D).

**Fig. 1** Search and selection flow diagram in accordance with PRISMA 2020 (Page et al., 2021)

## Analysis

We used *R* 4.3.2 (R Core Team, 2022) for statistical analyses, primarily relying on the *rcrossref* (Chamberlain et al., 2021) and *pybliometrics* (Rose & Kitchin, 2019) packages for the literature search, the *ASySD* (Hair, 2021) package for deduplication, the *metafor* package for conducting the meta-analysis (Viechtbauer, 2010), and the *clubSandwich* package for robust variance estimation to handle dependent effect sizes (Pustejovsky, 2022). Data processing and visualization continuously relied on the *tidyverse* package suite (Wickham et al., 2019). We used the *groundhog* package (Simonsohn & Gruson, 2023) to reproducibly use all package versions as of July 9, 2023. Finally, we used *metaUI* (Wallrich & Röseler, 2024) to create an interactive webapp that allows readers to further explore results.

Given the range of different facets of both diversity and performance, as well as the results of past meta-analyses, we expected the heterogeneity in the sample to be relatively high. Thus, a random effects model with a REML estimator

was used for all the relationships (Gonzalez-Mulé & Aguinis, 2018).

## Effect Sizes

We used Pearson's *r* as the main indicator of effect size. Whenever available, we used correlations obtained directly from original papers, or converted equivalent effect sizes (such as Cohen's *d* or odds ratios) using the formulae provided by the Campbell Review (Polanin & Snijlsteit, 2016). If only regression weights were reported, we converted them to correlations using the method outlined by Harrer and colleagues (2021). As a last resort, we contacted the authors to request correlation coefficients or raw data.

Correlations were corrected for measurement error by using the formula  $r_c = \frac{r_{obs}}{\sqrt{r_{xst}}\sqrt{r_{yst}}}$ . Correspondingly, sampling error variances were adjusted as follows:  $SE_{r_c}^2 = SE_{r_{obs}}^2 * \left(\frac{r_c}{r_{obs}}\right)^2$  (Wiernik & Dahlke, 2019). Even though indices of internal consistency (e.g., Cronbach's alpha) only capture one source of measurement error, these are usually the only reported form

of reliability in the fields this meta-analysis draws on. Missing reliability estimates were bootstrapped (i.e., sampled with replacement) from within the same category of diversity/performance measures and scale length (categorized based on the number of scale items into terciles of short, medium, and long scales). Single-item measures were not corrected.

### Dependent Effects

Frequently, studies report more than one relevant effect size derived from the same sample, for instance when different facets of diversity (e.g., multiple personality traits) were considered. Evidently, these results are not independent, so that an assumption of traditional meta-analysis models is violated. Therefore, most meta-analyses concern themselves with averages (e.g., van Dijk et al., 2012) or linear combinations of effect sizes (e.g., Triana et al., 2021). However, there is a consensus in the methodological literature that this reduces statistical power and risks introducing bias, so that *all* effect sizes should be used in evidence aggregation (Tipton et al., 2019). This requires the use of newer meta-analytic models that take the dependence into account. These use either reported or assumed correlations between effects sizes obtained from the same sample to correct standard errors. Here, in line with Harrer (2021), we used the correlated and hierarchical effects (CHE) working model for the meta-regression (Pustejovsky & Tipton, 2021) and assumed a correlation between effect sizes within the same study of .6. Then, cluster-robust standard errors provided by the *clubSandwich* package were used for all inferences about average effects (Pustejovsky, 2022).

Decision-tree approaches such as meta-CART, which supplement meta-regressions in our analyses (see below), cannot yet handle dependent effect sizes. Therefore, we created linear combinations of effect sizes within the same sample where all moderators had the same value, and then randomly sampled one of the combined effect sizes per sample for further analyses (e.g., if a sample yielded correlations based on two subjective and two objective measures of performance, we would create separate linear combinations for the subjective and objective measures, and then randomly sample either the subjective or objective measure for further analysis).

### Heterogeneity and Moderation

Initially, we conducted the Q-test to assess the presence of heterogeneity across the effect sizes and discuss both the 80% credibility interval and the  $I^2$  index as they provide distinct information regarding the amount of heterogeneity (Gonzalez-Mulé & Aguinis, 2018). When assessing whether the hypothesized moderators explain a share of this heterogeneity, we then needed to account for associations between

moderators. This is frequently ignored in meta-analyses, when a series of separate subgroup analyses is presented, yet that is akin to presenting a sequence of correlations rather than a multiple regression when testing multiple predictors in a primary study. To that end, we used two complementary methods here: (multi-level) meta-regression and meta-CART.

Meta-regression is akin to multiple regression in that it estimates how different predictors affect the observed effect size while controlling for all other predictors (Gonzalez-Mulé & Aguinis, 2018). *meta-CART*, on the other hand, results in decision trees that iteratively split the sample on one of the predictor variables until homogenous parcels of effect sizes are obtained (Li et al., 2017). This allows one to draw conclusions about *combinations* of moderators that result in high/low observed effects without having to specify interaction terms in meta-regression, which cannot be estimated with reasonable power within the usual constraints of a meta-analysis. (In the meta-regression, we only specify interaction terms between each moderator and the diversity dimensions to assess to what extent results differ for demographic, cognitive, and job-related diversity. Similarly, we will run separate meta-CART models for demographic, cognitive, and job-related diversity to ensure that differences between these dimensions become evident.)

Both approaches rely on complete data on moderators, which is rarely given in meta-analyses. Instead, moderators can often only be coded for specific studies as the context might not be described in sufficient detail in others. Typically, this results in subgroup analyses that are performed on different sets of studies, or in the exclusion of studies with missing data, which evidently carries a great risk of bias (Tipton et al., 2019). To do better, for both meta-regression and meta-CART, missing values need to be filled in. Generally, the best procedure for dealing with missing data is multiple imputation, in that it can result in unbiased estimates across a wide range of situations (Rubin, 2004). Its use has been advocated specifically in the context of meta-regression (Ellington et al., 2015) and some studies have started to use it (Hedger et al., 2016). Thus, we used it for the meta-regression. However, this is not possible for meta-CART as multiple decision trees cannot be combined analytically. Instead, we followed Hedger and colleagues (2016) and estimated a best-case and a worst-case model. For the best case, missing data was imputed with the correlations obtained from the observed data, which will under-estimate standard errors. For the worst case, conversely, missing data was imputed with values randomly selected from the observed values, which will over-estimate standard errors. The results of both analyses are reported, and only common patterns are treated as clearly supported by the evidence.

## Exploratory Analyses

We expected to include more variables that are not listed in the pre-registered coding sheet as possible moderators as we examine the literature. During that stage, we added teams' industry and function, as well as the specific diversity measure used. Analyses involving these are presented separately in the section containing exploratory results, as well as analyses diving deeper into the specific performance measures. In that section, we also discuss any evidence regarding non-linear relationships between diversity and performance.

## Publication Bias

Before assessing publication bias, we corrected for measurement error as outlined above since this can bias any test of publication bias (Wiernik & Dahlke, 2020). We then had to decide how to deal with dependent effect sizes, given that most methods to detect publication bias rely on independent effect sizes and that ignoring the dependence leads to drastically inflated type I error rates (Rodgers & Pustejovsky, 2021). In line with the simulation results and recommendations by Rodgers and Pustejovsky, we used two methods to test for publication bias. Firstly, we used an Egger's regression test to assess the asymmetry of the funnel plot, with robust variance estimation (RVE) taking care of dependence between effect sizes. In order to strike an appropriate balance between statistical power and type I errors, we followed the common practice highlighted by Siegel and colleagues (2021) and interpreted  $p$ -values below .1 as evidence for publication bias. Secondly, we used the 3-parameter selection model (3PSM) to directly estimate whether non-significant results have a lower chance of being published than significant findings. This cannot presently be extended to account for dependent effect sizes but sampling one effect size per sample results in a test that combines comparatively high power with a predictable type I error rate. Therefore, we bootstrapped 3PSM with effect size sampling, and report the median results and distribution of 5000 bootstrap resamples. Given that an alpha level of .05 is associated with a type I error rate of up to 10%, we relied on this threshold (Rodgers & Pustejovsky, 2021).

Analyses of publication bias become less reliable in the presence of heterogeneity—and are ultimately also less informative. Therefore, we report separate assessments for each dimension of diversity (demographic, cognitive, job-related). Also, we restrict our analysis of publication bias to published studies (while results for our full meta-analytic sample are reported in the Supplementary Materials).

## Statistical Sanity Checks

Simple statistical checks can be used to identify some instances of misreporting and thus help calibrate trust in the reliability of specific sources. Where means and standard deviations are reported based on integer measurements (e.g., Likert scales), the GRIM (Brown & Heathers, 2017) and GRIMMER (Anaya, 2016) tests can identify impossible means and standard deviations respectively. These were used to validate any measures of diversity or performance based on a sample size below 500 and derived from either a single integer measurement or a scale of at most three items, based on the functions implemented in the *rsprite2* package (Wallrich, 2021). Similarly, the *statcheck* R package was used to identify possible instances of misreporting of statistics (e.g., instances where reported  $t$ -values and  $p$ -values are incongruent), as proposed by Nuijten and Polanin (2020). As a robustness check, all analyses were repeated without effect sizes flagged by either of these methods, and divergences reported.

## Procedural Clarifications and Deviations

During the process of conducting the meta-analysis, we had to clarify some aspects of the protocol, and modify others. We do not expect that any of these reduced the severity of our tests. Here, we report the clarifications and deviations by stage:

### Search and Screening

- We did not contact authors of papers more than 20 years old to request details as we deemed it unlikely that they would still have access to the data—and as it would have been difficult to obtain current contact details in most cases (in line with Reimer & Sengupta, 2023).
- Initially, we did not specify how to screen references in included papers. As automated extraction resulted in 18,000 records, at most a very cursory title screening would have been possible, and ASReview has not been validated for titles only. Therefore, we pursued a two-pronged approach: we ran our search query over the references, and used the Open AI API to assess whether references might refer to empirical work on the diversity-performance link. Candidate references identified by either route were then manually screened. The full approach can be seen in SM 1C.

### Coding

- After double-coding an initial 20% of English-language studies, we failed to achieve the required interrater agreement that we had registered as a condition for single-coding—however, many deviations were due to systematic

differences that seemed fixable through a clarification of coding rules. Therefore, we clarified the coding rules and double-coded another 20% of English-language studies. At that point, we achieved the pre-registered required interrater reliability, with over 80% agreement on all variables and 92.4% agreement overall, so that we proceeded with a single coder.

- When it came to design, we dropped the quasi-experimental category. While some studies aimed to derive causal estimates (e.g., with instrumental variables), the reported *correlations* are still purely observational in these cases, so that it would not make sense to test whether they differ from other observed correlations.
- A substantial number of studies used the percentage of minority group members as an indicator of diversity. We only included these only if the “minority” group was in the minority in most of the teams, so specifically if the mean + 1 standard deviation of the percentage was below 50%.
- For task complexity, we had planned to code by analogy to Wood’s (1986) task complexity scale. However, this proved to be too ambiguous to support reproducible coding. Therefore, we operationalized task complexity using the level of education or professional expertise required to perform the task, split into *low* (requiring no tertiary education and limited professional expertise), *medium* (requiring undergraduate education or substantial professional expertise), and *high* (requiring postgraduate education or extensive professional expertise). Note that the inclusion of professional expertise led us to classify professional sports teams as engaging in tasks high in complexity, so that this is not merely a coding of educational requirements. Overall, it appears to tap the same levels as the registered definition but achieves adequate reliability.

## Analysis

- In our specification of the metaCART approach, we failed to appreciate that the method is based on cross-validation, and thus subject to random variations between runs. Therefore, we sought guidance from the developers of the method (E. Dusseldorp, personal communication) and followed their advice to run the model 50 times and then select the modal number of nodes. As we were doing that, it seemed to make sense to also move away from drawing a single sample of independent effect sizes to reduce the influence on randomness, so that we ran 50 trees on each of 10 different samples drawn from our dataset.
- We planned to use the 3-PSM to consider publication bias. However, this would have been mis-specified as it tests whether selection occurs based on both significance *and* direction. Given that we expected positive and negative correlations, we used an extension of the selection

model that allows for selection for significance *regardless* of direction.

- We did not consider how to deal with sample sizes in special circumstances, specifically for repeated measures, and for samples of outputs produced by overlapping teams. In either case, using the reported sample size would not do justice to the weight of the evidence, under-estimating it in the former and over-estimating it in the latter case. Therefore, we calculated an effective sample size for studies using repeated measures (for categories where we could estimate a meaningful year-on-year correlation, see SM 2A for details) and capped the sample size of the (very large) studies that sampled team outputs such as patents or articles rather than teams to be in line with the largest samples of teams.

## Results

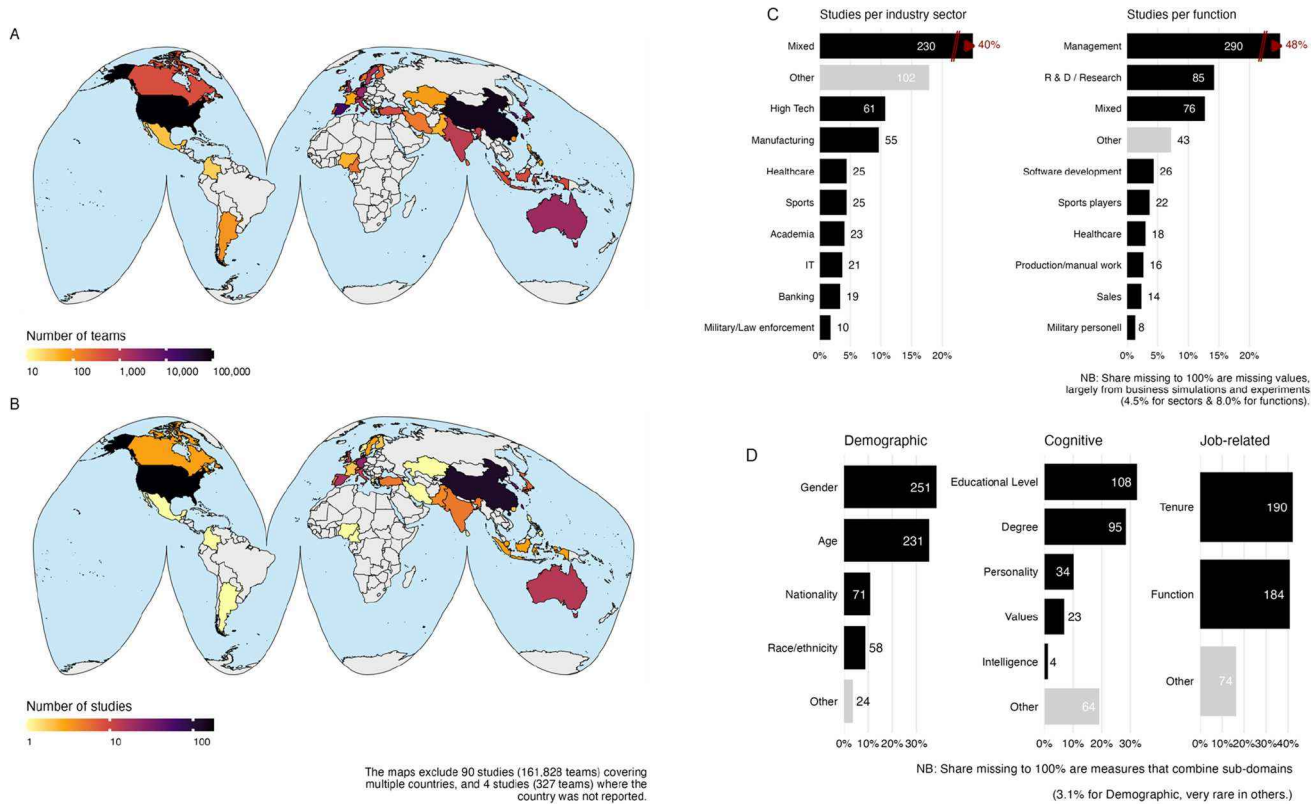
### Sample Description

The present meta-analysis is based on a diverse sample of 2638 effect sizes, derived from 646 samples. Figure 2 presents the breakdown by location, industry section, function, and diversity sub-domains. It is worth noting that a majority of studies come from the USA (32%) and China (21%), with the remainder spread fairly widely, mostly across industrialized countries (see panels A and B). Nearly half of the studies (48%) concerned management teams, which were mostly top management teams (89% of management teams, and thus 43% of the dataset), with the remainder spread over a wide range of functions (see panel C). When it comes to the specific sub-domains of diversity, it is worth noting that demographic diversity largely referred to gender (38%) and age diversity (35%) rather than race/ethnicity (9%), while cognitive diversity predominantly referred to educational levels (32%) and degrees (28%). Job-related diversity, finally, largely concerned diversity in tenure (42%) and function (41%, see panel D).

### Main Effects

The random-effects meta-analysis with robust sandwich standard errors showed that diversity (across all dimensions) had significant positive associations with team performance (see Table 3). However, based on the registered smallest effect size of interest, these associations were insubstantial, as the hypothesis that they were smaller (in absolute value) than  $|r| = .1$  was supported for all domains, with  $ps < .001$ . Also, while the average correlation differed significantly between diversity domains,  $F(2, 2635) = 5.84$ ,  $p = .003$ , this association was insubstantial,  $R^2 = 0.2\%$  (0.00%, 0.72%) and significantly below the pre-specific smallest effect size of interest of 5%,  $p < .001$ . When considering the results per sub-domain (shown





**Fig. 2** Overview of the sample by location (panels **A** and **B**), industry sector and function (panel **C**), and diversity sub-domain (panel **D**)

in Fig. 3), it is worth noting that no sub-domain showed a substantial correlation between diversity and performance. The estimated correlations were significant and insubstantial (i.e., significantly below an  $|r|$  of .1) for diversity in gender, nationality, degree, function, and tenure, not significant and insubstantial for diversity in age, race/ethnicity, educational level, and values, and inconclusive for the remaining sub-dimensions (personality and intelligence).

**Moderation**

After accounting for differences between diversity domains, a significant amount of heterogeneity remained,

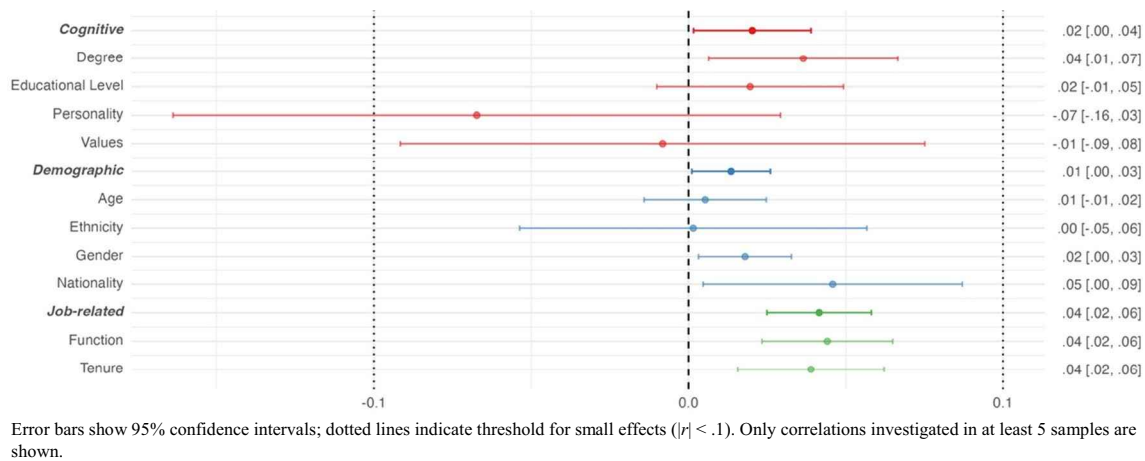
$QE(2635) = 23,600.60, p < .001$ . The credibility intervals shown in Table 3 show that substantial positive and negative correlations regularly appear for all domains. A decomposition of the  $I^2$  statistic suggested that 1.7% of this large variance in effect sizes could be attributed to between-sample differences (level 3), while 91.7% of the variance could be attributed to differences between the effects studied (level 2). All three indicators suggested that tests for moderation were in order.

However, not all pre-specified moderators could be tested. Due to limitations in the data, we could not meaningfully include diversity climate or psychological safety, as these were very rarely reported, and if so, were always positive. Given the

**Table 3** Relationship between diversity and team performance as per RE RVE meta-analysis

Domain	<i>k</i>	<i>r</i>	Equivalence tests		
			$ r  < .1$	$ r  < .05$	80% credibility interval
Overall	2638	.024 (.015, .033) ***	< .001	< .001	(-.167, .215)
Demographic	1105	.014 (.001, .026) *	< .001	< .001	(-.178, .205)
Cognitive	747	.020 (.001, .039) *	< .001	.001	(-.171, .212)
Job-related	786	.042 (.025, .058) ***	< .001	.161	(-.150, .233)

*Notes.* Values in square brackets following *r* indicate 95% confidence intervals. All significance tests and intervals are based on cluster-robust standard errors to account for clustering of effect sizes within samples  
 †  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



**Fig. 3** Estimated correlation between diversity and team performance depending on diversity domain and sub-domain

lack of variance, the missing data could not be imputed. Similarly, we could not meaningfully include virtuality and authority differentiation, as these were rarely reported, and associated with very specific types of teams. Specifically, sports teams were among the few that were explicitly working in the same space, while low authority differentiation was primarily found in student project teams. These associations, together with the fact that other reported data was reported because it was deviant, and missing data thus missing *not* at random, suggested that imputation would again produce misleading results. Therefore, these four moderators had to be dropped from our analyses. Finally, the criterion for performance could not meaningfully be imputed, as many measures are inherently ambiguous—therefore, we only considered this in univariate analyses, but dropped it from the multivariate meta-regression. As an *exploratory* replacement for authority differentiation, we considered whether countries' cultural power distance would moderate the relationship between diversity and performance.

As a starting point, and for comparability with earlier meta-analyses, we ran separate univariate meta-regression models for each moderator. These are reported in Table 4, separated into sections for the registered and further exploratory moderators. Equivalence tests were also conducted at the univariate level and shown in that table.<sup>7</sup> They indicated that none of the

<sup>7</sup> To enable the estimation of BCa confidence intervals for  $R^2$  (which provide the most accurate coverage according to Viechtbauer, 2023), 5000 bootstrap resamples had to be drawn for each moderator. Given that this involves the estimation of two multilevel meta-regression models each time, it is very computationally intensive (~50 CPU-hours per moderator), so that we could only do it either in the univariate or the multivariate case. Given that the incremental  $R^2$  is usually smaller than the raw  $R^2$ , and that the incremental  $R^2$  depends on the presence of our specific set of moderators, we came to believe that reporting and testing the raw contribution of each moderator to explaining the variance in effect sizes would be more useful for readers interested in specific moderators.

pre-registered moderators explained a *substantial* amount of variance (i.e., no  $R^2$  was greater than 5%), even though several moderators explained a statistically *significant* amount of variance. Specifically, among the registered moderators, the complexity of the task, the longevity of the team, the performance rater (particularly when dichotomized into objective vs subjective ratings), the article focus, the year of data collection, and the countries' level of collectivism were associated with effect sizes for at least some domains. Among exploratory moderators, countries' level of power distance, the country of data collection, whether a team was a top-management team, and the team's function showed significant correlations with effect size, with country and function potentially showing a substantial association (in that their  $R^2$  was not significantly below 5%). Figure 4 shows the relationships between the *significant* moderators<sup>8</sup> and the meta-analytic estimates (see SM 2C for the remaining results, and for full tables). To summarize, it can be seen that—in line with the hypotheses—high rather than low task complexity was associated with a more positive relationship between diversity and performance for cognitive and job-related, but—contrary to expectations—not for demographic diversity. Articles that hypothesized a relationship between diversity and performance consistently found a stronger relationship than those where diversity only featured descriptively (e.g., as a covariate). Subjective performance ratings differed systematically from objective ratings, in that they yielded a more *positive* relationship between job-related diversity and performance, and a more *negative* relationship between demographic diversity and performance—but no differences between various subjective raters emerged. Overall,

<sup>8</sup> We omit country differences from the main manuscript, as these sub-samples are often dominated by a single study (or a closely related body of work) situated in a particular industry and should thus not be seen as indicating country-level differences. All details can be found in SM 2C.

**Table 4** Univariate (multivariate) tests of moderators

Moderator	$N_S$	$k$	Significance tests				Overall effect size	
			Overall	Demographic	Cognitive	Job-related	$R^2$	$R^2 < 5\%$
Complexity	578	2393			* (†)	*	0.00% (0.00%, 0.36%)	< .001
Interdependence	539	2229					0.89% (0.66%, 2.28%)	< .001
Longevity	542	2298				*	0.15% (0.00%, 0.75%)	< .001
Diversity measure	640	2609					0.04% (0.00%, 0.76%)	< .001
Performance rater	644	2623				* (*)	0.00% (0.00%, 0.09%)	< .001
Design	646	2638					0.00% (0.00%, 1.06%)	< .001
Article focus	646	2638	** (**)	*		†	0.77% (0.49%, 1.84%)	< .001
Perf. criterion	90	268					0.00% (0.00%, 4.36%)	.031
Year of data coll	646	2638			†	*	0.08% (0.00%, 0.63%)	< .001
Collectivism	549	2328			** (*)		0.20% (0.04%, 0.99%)	< .001
Power distance	549	2328	*		*		0.59% (0.23%, 2.16%)	< .001
Objective rating	634	2623		*		**	0.00% (0.00%, 0.07%)	< .001
Country	646	2596		*			3.91% (1.51%, 6.89%)	.392
TMT	646	2638			†	*	0.15% (0.01%, 0.96%)	< .001
Student sample	569	2638					0.09% (0.00%, 0.39%)	< .001
Industry sector	595	2397					2.19% (1.26%, 5.90%)	.257
Team function	644	2492	*				2.96% (2.56%, 5.13%)	.755

*Note.*  $N_S$  indicates the number of samples including data on that moderator,  $k$  the number of effect sizes. Values in square brackets indicate 95% confidence intervals. Significance tests are based on cluster-robust sandwich standard errors to account for the clustering of effect sizes within samples, while  $R^2$  confidence intervals are BCa, estimated from 5000 bootstraps from the multi-level meta-analysis model as estimated by *metafor*. They do not use cluster-robust sandwich standard errors and are thus more liberal than what was used for significance testing.  $R^2 < 5\%$  show equivalence tests, testing whether  $R^2$  is significantly smaller than the smallest effect size of interest. Upper block shows pre-registered moderators, while the lower block shows exploratory moderators

†  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

and in line with the  $R^2$ -values reported in Table 4, these differences were small, and may thus be of limited practical importance.

To account for inter-relations between moderators, we estimated a multivariate meta-regression model including all pre-registered moderators. In this model, based on 100 imputations of missing data, only some moderators remained significant (reported in brackets in Table 4), in that they explained *unique* variance in the effect sizes. This was the case for article focus (overall), collectivism (for cognitive diversity), performance rater (for job-related diversity), and complexity (marginally, for cognitive diversity).

In a final step, we used *metaCART* to uncover potential interactions between moderators. We identified substantial variability in results between repeated runs. To select a suitable classification tree, we followed guidance by the developers of the method (E. Dusseldorp, personal communication) to estimate 50 trees and then select the mode of the number of resulting leaves. To further reduce distortions introduced by the effect size sampling, we repeated this across 10 datasets sampling different effect sizes from each sample. Across two modeling strategies (conventional and lookahead) and two imputation strategies (best and random), the modal result for the overall

dataset was three leaves, where *metaCART* split twice on collectivism to single out a small subsample (7 studies) that were predominantly set in Turkey and showed larger effects. This is very unlikely to suggest that collectivism has different effects precisely at that level, and while there might be a moderator combination that sets these studies apart, we cannot identify one with any confidence. This finding was replicated to some extent in the dataset including only job-related correlations, while the modal result for the other domains was that *metaCART* could not identify any moderation. Therefore, *metaCART* could not substantially add to our understanding of moderator interactions here. Full details can be found in SM 2C.

## Publication Bias

To explore potential publication bias, we began with funnel plots and Egger's test of funnel plot asymmetry to identify whether small studies systematically differed from larger studies. Figure 5 shows the results. For demographic and job-related diversity, there was no evidence that standard errors predicted effect sizes, so that it appears unlikely that substantial selection for *positive* effects and statistical significance took place there (note that this does not consider selection for significance

operating in both directions). For cognitive diversity, Egger's regression test was significant with  $p = .016$ . However, the regression slope pointed in an uncommon direction ( $\beta = -0.60$ ) indicating that studies with larger samples reported *larger* positive associations. This is unlikely to indicate publication bias against significant results but may rather suggest substantive differences between smaller and larger studies here.

Selection models (extended from 3-PSM) were used to directly estimate whether significant (negative or positive) correlations had greater likelihoods of getting published than non-significant correlations. Across two different bootstrapping methods, there was no evidence of publication bias in favor of significant correlations in either direction. However, it appeared that for demographic diversity, *negative* significant relationships for demographic diversity were substantially less likely to get published than *positive* significant correlations, so that only 32% (13%, 73%) of the effect sizes expected in that category were reported.<sup>9</sup> For job-related and cognitive diversity, non-significant correlations appeared to be *more* likely to get published than non-significant correlations. Full results are available in SM 2D. Overall, this suggests that publication bias is unlikely to inflate the meta-analytic estimates or their heterogeneity, though the estimate for demographic diversity *might* be biased upwards. Here, it needs to be noted that the results of interest in the original papers were rarely correlation coefficients per se, so that this result does not imply that there is no publication bias at the level of claims about diversity.

## Exploratory Analyses

### Non-Linear Relationships

All statistical analyses presented here, and most research on the diversity-performance link to date, have focused on linear relationships. While there have been arguments to suggest that the relationship may be non-linear, this cannot be meta-analyzed based on reported summary statistics describing linear relationships, such as correlation coefficients (Gasparrini et al., 2012). Therefore, we can only offer a qualitative summary of the evidence for non-linear relationships.

Out of the 534 English-language reports included in this meta-analysis, 33 reported tests of non-linear relationships. Among the 26 that set out hypotheses, most found (partial) support for them (88%). Where a specific functional form was hypothesized, this usually took the form of an inverted-U ( $\cap$ ) shape, where optimal performance is achieved at an intermediate level of diversity, with weaker performance at both higher and lower levels of diversity (58%). Conversely,

27% of hypotheses stipulated a U-shape, where performance is higher in teams high or low in diversity. However, only one of the articles testing non-linear relationships correctly tested for the presence of a turning point (i.e., Hoisl et al., 2016), while most others relied solely on the significance of the quadratic term, which is also compatible with relationships that plateau or accelerate, without ever turning (Leif & Simonsohn, 2014). A comprehensive summary of the evidence can be found in SM 2G, while the implications will be discussed below.

### Differences Between Team Types

To further explore when diversity makes a difference, we investigated whether the relationship between diversity and performance is different for various team types. As can be seen in panel C in Fig. 4, the performance of top management teams was more positively correlated with cognitive diversity, and less positively correlated with job-related diversity compared to other teams, resulting in no significant difference overall. Relatedly, where performance was measured as firm-level financial performance (a subset of top team outcomes), the overall diversity-performance link was weaker than that for other outcomes ( $r = .011$  [ $- .001, .023$ ] vs  $r = .033$  [ $.020, .045$ ],  $p_{\text{Wald}} = .012$ ), driven by differences in the association for job-related diversity.

For teams engaged in research and development activities, diversity was more closely associated with performance than for other teams ( $r = .058$  [ $.033, .083$ ] vs  $r = .020$  [ $.010, .029$ ],  $p_{\text{Wald}} = .007$ ), particularly when it came to job-related (but not cognitive) diversity. Relatedly, for outcomes explicitly related to creativity and innovation, the diversity-performance link was stronger than for other outcomes ( $r = .056$  [ $.025, .088$ ] vs  $r = .020$  [ $.011, .029$ ],  $p_{\text{Wald}} = .024$ ), particularly for cognitive and job-related (but not demographic) diversity.

More broadly, the industry sector teams operated in was not a significant moderator of the diversity-performance links, though this estimate is rather uncertain and *not* equivalent to the smallest effect size of interest (Table 4). Therefore, further research is needed here. Team's function was a significant moderator, primarily driven by the difference between R&D teams and others already discussed above. Other differences are visible in Fig. 4.

### Use of and Differences Between Diversity Measures

Against our expectations, the broad operationalization of diversity as variety or separation did not affect the diversity-performance relationship. Therefore, we explored the use of measures further. Across the sample, the most used measure was the Blau index (also called Herfindahl–Hirschman),

<sup>9</sup> This estimate and confidence interval is based on the pre-registered effect-size-bootstrapping. Using the cluster-bootstrapping approach supported by preliminary simulation results (Pustejovsky & Joshi, 2023), we obtained an estimate of 38% [14%, 99.7%].

accounting for 35.9% of effect sizes. When measured as variation, diversity was also commonly measured with the Teachman entropy index (4.0%). For diversity as separation, the coefficient of variation was used most frequently (16.1%), followed by the standard deviation (13.5%). Additionally, 5.9% of effect sizes were based on binary splits, often indicating whether there was any diversity on a particular dimension. Any other measurement was used in less than 4% of cases (full details in SM 2E).

Unfortunately, the use of measures was strongly associated with the diversity sub-domain—educational level, tenure, and age were the only sub-domains where variety and separation each accounted for at least 10% of the effect sizes. Therefore, we explored whether the conceptualization of diversity and/or the use of measures was associated with effect sizes within these sub-domains (noting that these tests will have much lower power than moderation tests on the full sample). There was only a *marginally* significant trend for tenure diversity, where the estimate for the association between variety and performance was larger than that for separation and performance, and no longer significantly smaller than the smallest effect size of interest ( $r = .092 [.024, .161]$  vs  $r = .027 [.003, .051]$ ,  $p_{Wald} = .070$ ).

### Relationships Between Reported Correlations and Citation Counts

With a wide range of model specifications, we found no evidence for a relationship between the size, direction, and significance of the correlation between diversity and performance, and the number of citations a report received when controlling for its publication type (e.g., journal article, dissertation), language, and the publication year (see SM 2E). This may again be related to the limited relationship between the correlations and articles’ focal results yet does not provide evidence for a suspicion that the reception of the evidence is systematically skewed.

### Robustness Checks

#### Exclusion of Studies Showing Evidence of Misreporting

Our dataset did not include any retracted papers (per the Retraction Watch Database as of 10/02/2024). However, the GRIM test flagged two papers that reported means that were inconsistent with the reported sample sizes and scale ranges, and the *statcheck* package flagged 21 papers with reporting mistakes (some of which were very minor, such as

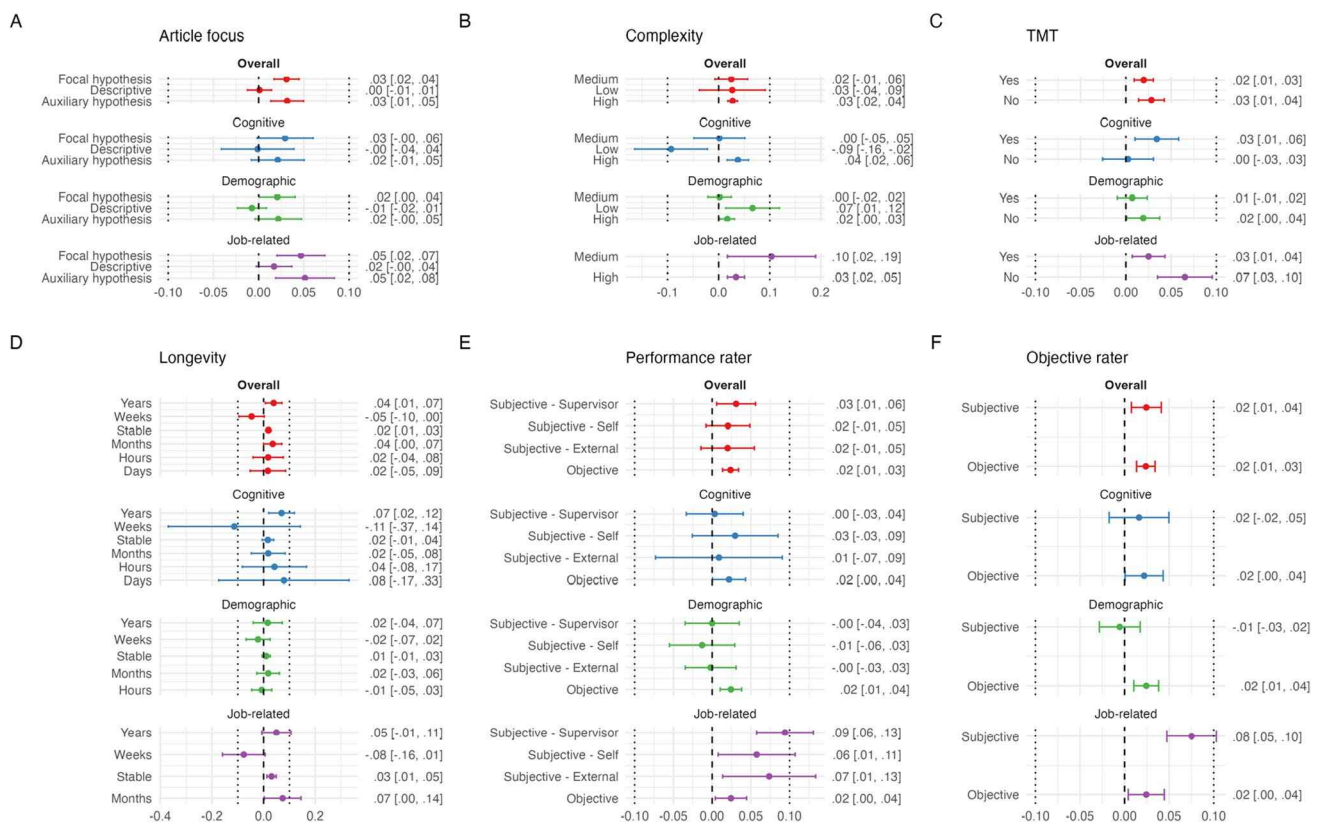
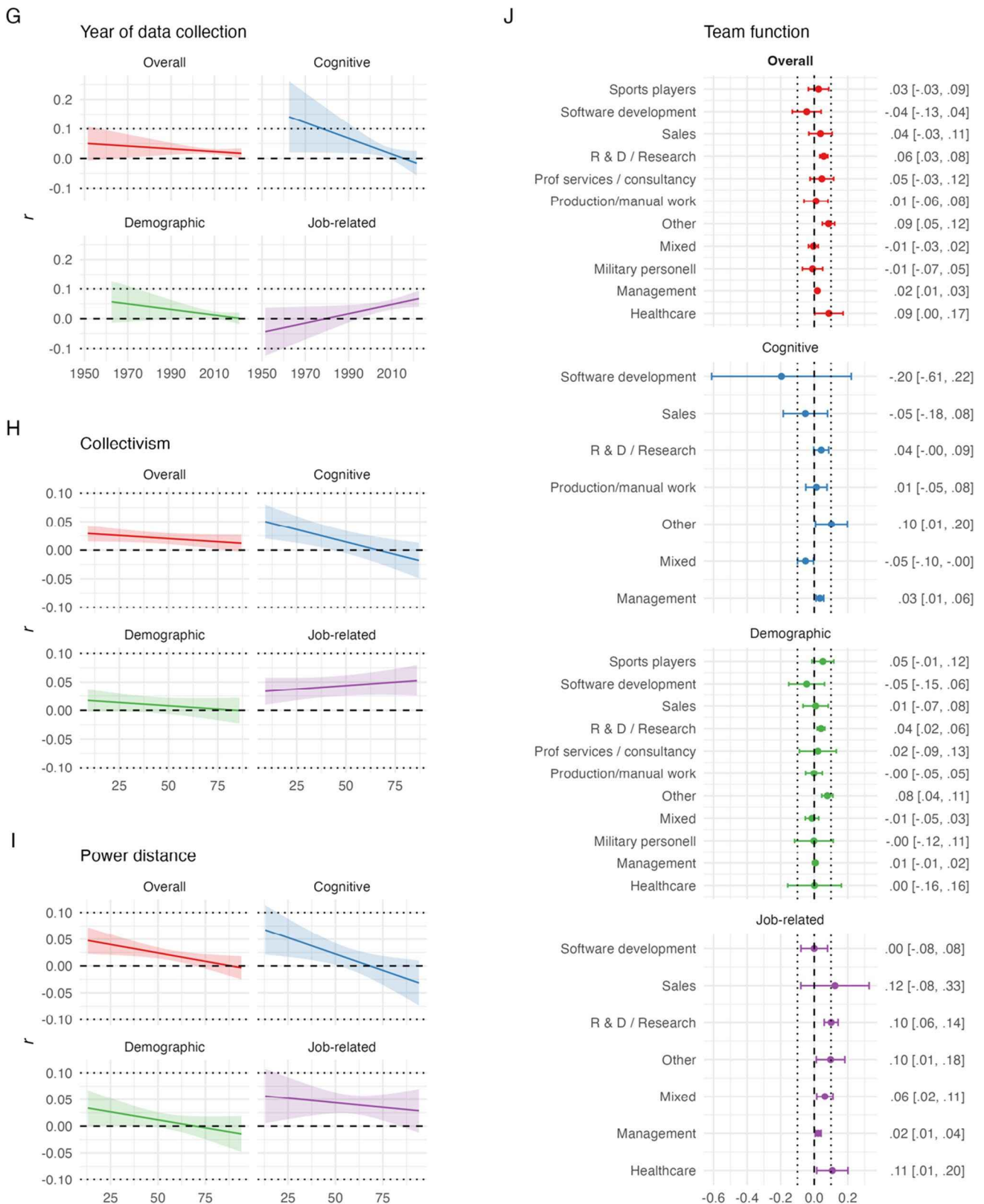
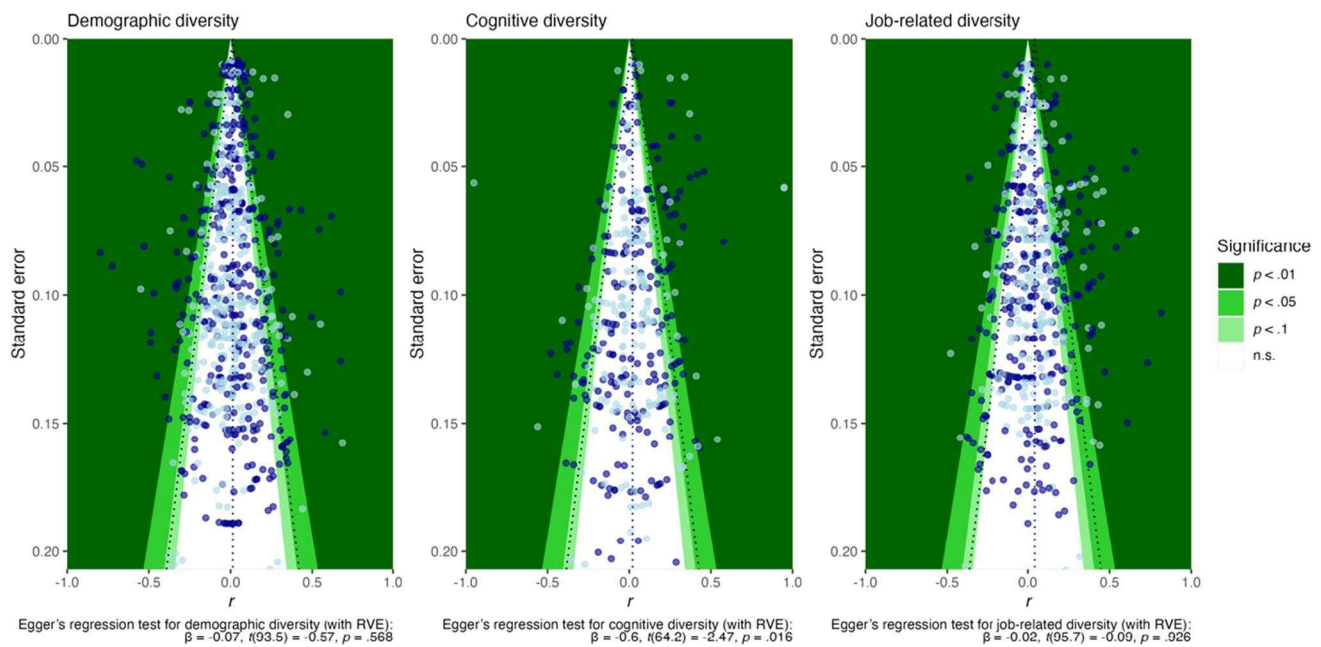


Fig. 4 Estimated correlation between diversity and team performance depending on moderator values



Error bars show 95% confidence intervals; dotted lines indicate threshold for small effects ( $|r| < .1$ ). Only correlations investigated in at least 5 samples are shown. The length of regression lines corresponds to the range of observed data.

Fig. 4 (continued)



**Fig. 5** Funnel plots showing the observed effect sizes in relation to their standard error and statistical significance. The dotted lines in each plot show the meta-analytic effect size estimate with its 95%

confidence interval at a given standard error. For legibility, the most extreme 1% of standard errors is not shown

reporting  $p < .004$  instead of  $p = .004$ ). Therefore, we reran the main meta-analysis without the 63 effect sizes from these 23 papers. This only resulted in minor changes, with the estimated correlations changing by .003 or less. While this pushed the significance of the correlation between demographic diversity and performance over the threshold (from  $p = .035$  to  $p = .055$ ), we take it to suggest that our results and their interpretation are not substantially affected by possible misreporting, in as far as this can be detected with such simple methods.

### Restriction to Objective Performance Measures

While we already considered objective vs subjective performance measures as a moderator, we registered to conduct analyses focused exclusively on objective measures as a robustness check. In the remaining dataset of 1547 effect sizes, the main results were in line with what was to be expected from the moderation analyses: the expected correlation between demographic diversity and performance was larger than in the full dataset (.025 [.010, .037] vs .014 [.001, .026]), while the correlation between job-related diversity and performance was smaller for objective-measures only (.025 [.005, .046] vs .042 [.025, .058]). However, the point estimate for cognitive diversity was identical and none of the differences was statistically significant. Regarding moderators, the pattern of results was similar, though the difference

between correlations reported for focal rather than descriptive tests occurred only for demographic diversity. Full details can be found in SM 2E.

## Discussion

Overall, our results show that diversity (across demographic, job-related, and cognitive dimensions) is positively correlated with team performance, but with an insubstantial effect size: on average, diversity (on one trait) explains far less than 1% of the variance in team performance. However, the observed effects vary widely, with substantial negative and positive effects well within the 80% credibility interval. Therefore, the identification of factors that explain this variation is critical, so that we carried out moderation analyses. However, this was hampered by limited description of teams' contexts and tasks in the literature, so that some proposed moderators could not be tested.

Nevertheless, what we found broadly supports the contention that diverse cognitive resources may have value, while contrasting social identities may be less beneficial. Specifically, at the level of sub-domains, we found that diversity in degrees, functions, and nationalities was significantly related to performance, likely because they all reflect possession of distinct bodies of knowledge. Conversely, diversity in age, race/ethnicity, educational levels, and personal values was

not significantly related to team performance, likely because these categories are less related to cognitive resources and more related to social identities. However, the positive correlations for gender and tenure diversity do not quite fit this pattern. Here, we would speculate that the positive relationship for gender diversity may primarily reflect a more efficient use of talent (by recruiting from under-represented groups), while tenure diversity may make it more likely for distinct perspectives to remain salient, and thus valuable—yet this requires further research and/or theorizing.

When it comes to the types of tasks teams engaged in, teams pursuing tasks high in complexity generally showed a more positive correlation between job-related and cognitive diversity and performance, possibly because these tasks could benefit from diverse perspectives and skill sets (Sulik et al., 2021). Similarly, diversity had a more positive relationship with team performance for teams engaged in research and development tasks and for teams that pursued outcomes related to creativity and innovation. However, none of these settings affected the relationship between demographic diversity and performance, and the average correlations remained insubstantial ( $<.1$ ) throughout.

When it came to team processes and context, many reports lacked details, so that we could not test whether diversity climate, psychological safety, or virtuality make a difference. We also had insufficient information on authority differentiation within teams, but it appears likely that this is associated with national power distance—in that teams in countries low in power distance are more likely to spread authority within the team. Across the dimensions, teams in countries low in national power distance showed a stronger relationship between diversity and performance, which we take to suggest that it is important to diffuse authority within a team, so that space is created for distinct perspectives to emerge. Across countries, greater collectivism predicted a more negative relationship between cognitive diversity and team performance, likely because a greater focus on team cohesion makes it more difficult for different perspectives to emerge. Our results are summarized in Table 5.

While we did not find substantial evidence of publication bias, the substantial difference in reported correlations for descriptive rather than hypothesized relationships is important to note. This suggests that claims made—rather than correlations reported—may be selected for significance, so that a reading of the literature may create a somewhat misleading impression. Also, the indication that significant negative correlations between demographic diversity and team performance may be less likely to be published than others needs to be noted as it might affect the perception of the literature, though its potential impact on the meta-analytic results is limited due to the preponderance of correlations that lack significance.

## Theoretical Implications

While we found small average correlations, and thus small differences between levels of moderators, the pattern overall corresponds to the idea that an understanding of diversity effects must consider both the downsides of conflicting social identities and the upsides of richer cognitive resources. Situations that called for substantial cognitive resources (e.g., situations high in complexity, or R&D teams), and tasks that focused on creativity, particularly benefited from diversity—but, given the small overall effect size, it appears that the contradictory dynamics balance out on average.

Similarly, we confirm the finding by van Dijk et al. (2012) that objective performance measures show a different pattern of association with (demographic and job-related) diversity than subjective measures, so that diversity may have distinct effects on team performance and the perception of team performance. Unfortunately, we did not have data on diversity climates (i.e., beliefs about diversity)—yet the fact that we got near-identical estimates for the diversity-performance relationship for objective measures across domains, but distinct estimates for subjective measures may indicate that beliefs concerning the value of diversity may affect perceptions more strongly than results.

## Need to Focus on Non-Linear Relationships

Theoretically, it appears highly implausible that diversity would have a linear relationship with performance, in that each incremental “unit” would have the same effect on performance. Yet, this is what most reports assume, generally without any justification. Compelling argument can be made for various functional forms. For instance, one may posit that increasing diversity from a low baseline primarily increases the breadth of cognitive resources, while increases from a higher baseline led to a situation where social identity concerns become dominant and undermine team dynamics (e.g., Luan et al., 2015). If so, moderately diverse teams could be expected to outperform both minimally and maximally diverse teams (Sulik et al., 2021). Conversely, however, one might argue that conflict is highest at an intermediate level of diversity, where teams can break down into a small number of subgroups—so that teams are better off either homogenous or maximally diverse, resulting in a U-shaped relationship (Dayan et al., 2017). This can be linked to *fault-line* research which suggests that teams underperform if they can break down into a small number of subgroups that share multiple identities (Kirkman et al., 2013), which appears most likely at intermediate levels of diversity—yet this body of research is only weakly linked to the literature discussing diversity effects. Relatedly, some research, particularly



**Table 5** Summary of results

Hypothesis/research question	Outcome	Summary
RQ1a: Is the link between diversity and team performance insubstantial (i.e., $ r  < .1$ )? Does this differ between the dimensions of diversity?	✓	Significantly positive, but insubstantial association between diversity and performance for all dimensions. Insubstantial differences between the three dimensions
H1: Diversity has a substantial positive association with performance when the task is high in complexity	✗	While greater task complexity predicts a stronger positive relationship between job-related and cognitive diversity and performance, the estimates remain below the $ r  < 0.1$ . For demographic diversity, the correlation is not significantly associated with task complexity. Interdependence did not significantly predict effect size
H2: Diversity has a more positive association with team performance when the task requires a high level of interdependence	✗	Could only be tested in small sample, as criterion was often unclear, and rarely about production. In that sample, no significant difference between production and creative tasks
H3a: Diversity has a more negative link to performance in tasks that focus on maximizing production of an output with a pre-defined strategy	(✗)	Could only be tested in rather small sample, as criterion was often unclear. Nevertheless, in that sample, there was no significant difference between divergence and convergence
H3b: Diversity has a more positive link to performance in tasks where performance depends on creative divergence rather than convergence	(✗)	Cognitive diversity has a more negative relationship with diversity in countries higher in collectivism, while there is no significant relationship with the other domains
RQ2a: Is the relationship between team diversity and performance related to a country's level of collectivism versus individualism?	Mixed	The regression slope for year on effect size is not significant but negative for both the overall sample and for demographic diversity
H4a: The relationship between diversity (particularly demographic diversity) and team performance has become more positive over time	✗	Lack of support for H4a precludes this
H4b: The relationship between diversity and team performance is positive and substantial (i.e., $r > .1$ ) in evidence from the past decade (2012–2022)	✗	<i>Reported too rarely in primary studies.</i> Used national power distance as an exploratory “replacement” as greater cultural power distance is likely to correlate with greater authority differentiation. In line with the hypothesis, greater power distance was associated with a more negative diversity–performance relationship, overall, and for demographic diversity
H7: Diversity has a more positive link to performance when the team is low in authority differentiation than when it is high in authority differentiation	(✓)	No systematic relationship between team's longevity and observed correlations. Significantly weaker correlations for short-lived teams for job-related diversity in univariate test likely due to differences in tasks
RQ3b: How does the link between diversity and performance differ depending on the longevity of a team?	✗	In line with earlier findings, objective ratings associated with more negative correlations for job-related diversity and (less consistently) more positive correlations for demographic diversity, compared to subjective ratings
RQ4a: How does the link between diversity and performance differ depending on whether performance is rated subjectively or measured objectively?	✓	No significant relationship, but weak test as measurement choice was very closely linked to diversity sub-domain. In exploratory analysis, marginally significant difference found for tenure diversity in line with expectations
H8: Diversity will have more positive associations with performance where it is measured as variety rather than separation	✗	

Table 5 (continued)

Hypothesis/research question	Outcome	Summary
H9: Studies where the link between diversity and performance is the focal hypothesis will report larger (H8a) and more positive (H8b) effect sizes than studies where this is an auxiliary or descriptive result	(✓)	Expected difference found between studies testing diversity effects as a focal hypothesis and those reporting descriptive results. Against expectations, auxiliary hypotheses were closer to focal than descriptive results
Omitted hypotheses related to diversity climate (H5), psychological safety (H6), and virtuality (RQ3a)	?	<i>Reported too rarely in primary studies</i>
Selected exploratory:		<ul style="list-style-type: none"> <li>✗ Citation counts not related to effect size or significance under a wide range of model specifications</li> <li>✓ Diversity-performance link stronger for creative and R&amp;D tasks than others</li> <li>? Diversity-performance link weaker when top-team diversity is correlated with firm financial performance</li> </ul>

concerning board gender diversity, has suggested that the benefits of diversity are only realized when there is a “critical mass” of minority-group members. While this could be seen as indicating a step-change in the relationship, from zero to a positive slope, it is typically operationalized as a U-shaped relationship (e.g., Joecks et al., 2013) as well. Alternatively, at the most basic level, one might expect that the benefits of more diverse cognitive resources—like those of almost all good things—diminish at the margin, so that a linear relationship would flatten out.

As outlined above, the reports summarized here offer limited insights as to which of these accounts is most (widely) appropriate, or as to whether a linear approximation is good enough, in that very few reports consider non-linearity theoretically or empirically, and that there was evidence for selective reporting among those that did. Within the limited evidence, a  $\cap$ -shaped was tested and supported most frequently—though often the tests used were unable to distinguish this from a diminishing curve that flattens out rather than turns negative. Here, further theoretical and empirical work is urgently needed.

### Practical Implications

The “business case for diversity” is widely articulated, and many efforts toward greater diversity are justified based on its claimed potential to increase organizational performance. The results here show that this may be too simplistic—diversity does not substantially improve (or hamper) team performance across the board. While it may be worth noting that the evidence suggests that diversity may be more likely to provide (minimal) benefits rather than harms on average, the picture is more complex.

For teams that perform tasks which directly benefit from a wide range of perspectives, such as those tasked with research, creativity, and innovation, it might make sense to aim for greater diversity *in order to boost performance*—even though the average associations remain small. Thus, it appears that diverse teams need the right context to flourish. Unfortunately, our data on team context was limited, yet it indicates that teams may benefit from shared authority and an appreciation of individuality, so that different perspectives can emerge effectively.

In other teams, expected increases in team performance do not provide a strong justification for increasing diversity. Evidently, there are many other important components of the (business) case for diversity, equity, and inclusion that persist—including moral, legal, and reputational reasons, as well as the need to find strong individual talent even if it does not come in the “prototypical” guise. Raising expectations regarding universal performance increases, however, appears not to be intellectually honest and may potentially backfire when expected changes do not materialize, and the

very foundation provided for diversity initiatives is weakened (Ely & Thomas, 2020).

## Implications for Research

Our review of a wide range of reports linking diversity and team performance leads us to make three recommendations to researchers in this field, most urgently when it comes to the measurement of diversity.

### Improve Diversity Measurement

Across the literature reviewed here, the most frequent citation in the methods sections appeared to be to Harrison and Klein (2007) who highlighted that diversity may be conceptualized as variety, disparity, or separation and that the measurement choice must reflect the chosen conceptualization. Nevertheless, that message was rarely heeded. Instead, their article was often simply cited as indicating that continuous and categorical measures need to be aggregated differently. Most strikingly, this led to the use of separation measures (particularly the coefficient of variation) when hypotheses appeared to be about variety. For instance, hypotheses about the *value* of tenure or age diversity seem to imply that a roughly even distribution of values over the possible range would be best (so that many different age groups are included), yet the most common measures used (i.e., the coefficient of variation and the standard deviation) would indicate that teams consisting of two homogenous sub-groups at the extreme ends are higher in diversity. Conversely, race/ethnicity was almost exclusively measured as variety, e.g., with the Blau index, even where hypotheses suggested concerns with subgroup formation that would be better reflected in measures of separation. In that regard, we are left to repeat the call by Bell et al. (2011) a decade on and urge researchers to choose measures appropriate to their hypotheses, and to justify these choices.

Furthermore, most measures of variety treated all categories equally—even though it appears clear that along most dimensions, some categories will be further apart (and thus have more distinct cognitive resources and social identities) than others, whether that is in teams composed of German, French, and Chinese workers, or teams composed of marketing, sales, and engineering specialists. Some studies developed more targeted measures of distance, such as Ingersoll et al. (2017) who operationalized nationality diversity by taking linguistic distance into account, yet this was usually done ad hoc without strong validation. Relatedly, studies used very different numbers of categories in measures of functional (or educational) diversity, which is problematic in that a larger number of categories appear to make it more likely that the differences between categories become highly uneven. Here, more explicit justifications

and (simulation) research into the impact of such choices are needed.

Finally, most dedicated diversity indices assume a non-linear relationship between the share of minority-group members and the diversity of the resulting group,<sup>10</sup> which is certainly defensible. However, none of the papers included here discussed that feature when choosing to measure diversity with such an index or as when choosing to simply use the percentage of minority group members. Given that (conceptually) results may radically diverge based on the choice of indices, and that readers' understanding of diversity (particularly in the two-category case) may often reflect something closer to percentages than to the indices, more explicit choices, reporting, and robustness checks may be advisable.

### Describe Context Clearly

The relationships between diversity and team performance vary widely, so that the identification of boundary conditions is a priority for research. Many studies are concerned with specific moderators—yet many moderators can only be meaningfully uncovered when aggregating findings across studies and settings. However, that requires a clear description of the context in which teams operated. In too many cases, it is unclear what the teams did, how they were managed, or even what sector they operated in. Relatedly, performance measures were often too generic to map onto specific tasks or theoretical expectations, particularly when they were based on subjective assessments. For instance, global ratings of team creativity are limited, in that they omit theoretically important distinctions such as that between convergence and divergence, and instead rely on subjective semantic understandings of broad terms.

### Consider Non-Linear Associations (Correctly)

As discussed above, more research needs to consider non-linearity in the association of diversity with team performance. However, this needs to be done correctly. In addition to the small number of studies that reported tests of non-linear relationships, methodological shortcomings limit the interpretation of the evidence. Most importantly, almost all studies only test whether a quadratic term of their diversity measure is a significant predictor of performance, and then use the coefficient sign to deduce whether there is a U-shaped or inverted U-shaped relationship. However, this is insufficient as it may lead to inaccurate claims regarding

<sup>10</sup> This can be illustrated with the Blau index, which is most used. Here, in a group made of men and women, an increase in the share of women from 0 to 10% would have 9 times the effect on diversity than an increase from 40 to 50% (moving from 0 to .18 in the first case, and from .48 to .50 in the second).

a reversal of the relationship when there is in fact only a diminishing (e.g., logarithmic) association. Instead, studies investigating non-linearity should present plots of the *observed data* that allow readers to understand its range and shape, and specifically test whether the slopes on both sides of a proposed turning point are significant, thereby confirming that increasing diversity indeed initially predicts *increases* and later *decreases* in performance (Simonsohn, 2018; see Hoisl et al., 2016 for an example of a similar analysis here).

## Strengths and Limitations

The current work has some substantial strengths compared to earlier meta-analyses. It used a comprehensive reproducible search strategy that included a substantial range of grey literature (particularly dissertations). It is also the first English-language meta-analysis that substantially goes beyond the English-language literature, primarily by integrating the voluminous Chinese literature as well as some sources in a range of other languages. However, the search beyond the English literature relied on Google Scholar and author contributions—future research should consider using dedicated bibliographic databases in other scholarly languages to ensure broader coverage. Also, search terms could be more comprehensive in future work—particularly given rapidly improving tools to semi-automate the screening process.<sup>11</sup>

Methodologically, multi-level meta-analytic models with robust-variance estimation made it possible to use all information included in reports (rather than just a single effect size per sample), which particularly enabled the inclusion of measures presented as covariates in a paper, and thereby reduced the potential influence of reporting biases. The use of equivalence-testing helped to avoid an excessive focus on statistical significance, which can be achieved for practically insignificant findings given the ever-increasing samples available for comprehensive meta-analyses. However, at present, the choice of the smallest effect size of interest may be seen as arbitrary, so that there is a need for researchers to start discussing what constitutes a substantially meaningful effect on (e.g.) team performance. The use of multiple imputation for missing data, and then meta-regression to move beyond the univariate testing of moderators, helped to calibrate the confidence in moderation analyses. However, it also became clear that univariate tests can enable

clearer communication of results, as average effects within a category are more interpretable than marginal means (and subject to fewer subjective choices regarding the reference levels of other moderators).

Most fundamentally, the interpretation of our results—correlations between diversity and team performance—is limited by the correlational nature of the data. Most effect sizes are cross-sectional, while for some, performance is lagged by one period (e.g., measured in the subsequent year). This means that associations between diversity and performance may be confounded, and that there may even be reverse causation in some circumstances. Some studies attempted to estimate causal relationships from observational data, for instance by using instrumental variable approaches (e.g., Ingersoll et al., 2017) yet they were rare, and their approaches varied too widely to aggregate these results separately. Reliable longitudinal evidence (e.g., from random-intercept cross-lagged panel models) was absent from our sample, and experimental evidence was rare and generally confined to fairly artificial lab settings (though the results there did not differ significantly from the observational effect sizes). Until more research with such designs is conducted, any interpretation of meta-analytic results has to keep their correlational nature in mind, which cannot provide direct support for causal claims. Nevertheless, we would argue that particularly the *absence* of substantial correlations is still informative, in that strong causal effects would seem to imply their presence.

## Directions for Future Research

Regarding primary research, we already discussed the need to increase clarity on non-linear relationships and diversity measurements/conceptualizations. In addition, further longitudinal research would be valuable if it uses cross-lagged (random-intercept) models or growth models that allow to estimate within-team changes following changes in diversity. This would need to go along with the development of theoretical accounts of temporal dynamics, particularly regarding non-linear effects of time (see Srikanth et al., 2016). Finally, further research is needed into the moderators that we identified as theoretically meaningful, yet could not test given the extant evidence, specifically virtuality, beliefs about diversity, psychological safety, authority differentiation, and different types of creative performance (e.g., convergence vs divergence).

Regarding evidence synthesis, one promising avenue would be to meta-analyze non-linear relationships, given their theoretical and practical importance and the dearth of evidence. However, that would need to take the form of a mega-analysis (also known as individual-participant data meta-analysis) where datasets underlying the various reports are retrieved, so that consistent non-linear (e.g., quadratic) models can be estimated and then aggregated.

<sup>11</sup> While contacting authors to request further papers, we received some good suggestions for keywords that may benefit future researchers who may wish to include opposites of diversity (homogeneity), additional performance terms (“outcomes,” “effectiveness,” “goal achievement,” “decision-making,” and “strategic choice”). Also, searching for “faultlines” may be helpful as much of that research controls for the “traditional” diversity indicators.

Additionally, meta-SEM models could be employed to understand the mechanisms linking diversity to team-level outcomes (in line with Triana et al., 2021). However, in line with their results, it appears to us that the literature mostly focuses on mediators explaining potential negative pathways (i.e., team processes that could be hampered by identity conflicts)—with some exceptions particularly around information elaboration. So, there might be a need for more primary research into team processes before meta-SEM can deliver a comprehensive picture.

Finally, the mechanisms and conditions by which job-related diversity affects performance appear under-theorized, at least where it is seen as distinct from cognitive diversity. We included it here primarily due to its practical significance and focused on cognitive and demographic diversity, yet there is scope for further work that focuses on this dimension.

## Conclusion

Diversity is at times taken to promise creative breakthroughs or threaten communicative breakdowns. Our results here show that the picture is more complex—when reduced to a single estimate, the average (linear) correlation between team diversities and team performances is too small to matter substantively. Instead, context matters. While it appears that diversity may benefit creative tasks, and that the diversity-performance link may be enhanced by a (team) culture that distributes power and values individuality, further research on this is needed—further research that measures diversity in line with a clear theoretical conceptualization, and that allows for non-linear relationships between diversity and performance. Additionally, interactions between multiple diversities need to be considered further. In the meantime, arguments other than those about performance may be more compelling when it comes to promoting action toward diversity.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10869-024-09977-0>.

**Acknowledgements** The authors wish to thank Alishba Aslam for her extensive administrative support, Ma Changlong for her support that enabled us to include the references of their recent Chinese-language meta-analysis, and Adrien Fillon, Gilad Feldman, and their team for creating a Registered Report meta-analysis template that helped us get started. They also wish to thank Elise Dusseldorp and Brenton Wiernik for methodological advice, and the Equalab research group at Goldsmiths, the Diversity Research Group at Birkbeck, and GroupLab research group at the University of Kent for valuable feedback following presentations at various stages of this project.

**Author Contribution** Lukas Wallrich designed the project and wrote the Stage 1 report. Victoria Opara conducted the literature search and led on the initial screening. Miki Wesołowska and Lukas Wallrich

conducted the full-text screening and coding, with contributions from Ditte Barnoth and Victoria Opara to the coding of the non-English literature. Sayeh Yousefi reviewed and synthesized the articles testing non-linear relationships. Lukas Wallrich conducted the analyses. Lukas Wallrich wrote the Stage 2 report and the Supplementary Materials, which were reviewed and edited by all authors.

**Funding** This research was supported by the Birkbeck Business School, which granted Lukas Wallrich GBP 4201.50 for this research project.

**Data Availability** All data and reproducible analysis code are available through this repository: [https://github.com/LukasWallrich/diversity\\_meta](https://github.com/LukasWallrich/diversity_meta). An interactive web application that allows for further exploration and analysis of the dataset can be found here: [https://lukaswallrich.shinyapps.io/diversity\\_meta/](https://lukaswallrich.shinyapps.io/diversity_meta/).

## Declarations

**Conflict of Interest** The authors declare no competing interests.

## References

### References marked with an asterisk (\*) are included in the meta-analysis

- \* Abdelghani, M., Monneau, E., Guaspere, C., Gargiulo, F., & Dubois, M. (2023). *PubPeer and self-correction of science: Male-led publications more prone to retraction*. arXiv preprint. <https://doi.org/10.31235/osf.io/5sq6h>
- \* Abebe, M. A. (2010). Top team composition and corporate turnaround under environmental stability and turbulence. *Leadership & Organization Development Journal*, 31(3), 196–212. <https://doi.org/10.1108/01437731011039325>
- \* Abrantes, A. C. M., Passos, A. M., Cunha, M. P. E., & Miner, A. S. (2020). Managing the unforeseen when time is scarce: How temporal personality and team improvised adaptation can foster team performance. *Group Dynamics: Theory, Research, and Practice*, 24(1), 42–58. <https://doi.org/10.1037/gdn0000113>
- \* Abutabenjeh, S., Dimand, A.-M., Rodriguez-Plesa, E., & Ahmadu, A. (2022). The nexus between gender diversity and research performance: The case of public procurement. *International Journal of Public Administration*, 46(10), 728–739. <https://doi.org/10.1080/01900692.2021.2013258>
- \* Açıkgöz, A., Günsel, A., Kuzey, C., & Seçgin, G. (2015). Functional diversity, absorptive capability and product success: The moderating role of project complexity in new product development teams. *Creativity and Innovation Management*, 25(1), 90–109. <https://doi.org/10.1111/caim.12155>
- \* Aggarwal, I., Schilpzand, M. C., Martins, L. L., Woolley, A. W., & Molinaro, M. (2023). The benefits of cognitive style versatility for collaborative work. *Journal of Applied Psychology*, 108(4), 647–659. <https://doi.org/10.1037/apl0001035>
- \* Aggarwal, I., & Woolley, A. W. (2013). Do you see what I see? The effect of members' cognitive styles on team processes and errors in task execution. *Organizational Behavior and Human Decision Processes*, 122(1), 92–99. <https://doi.org/10.1016/j.obhdp.2013.04.003>
- \* Ai, S., Xiangnan, T., & Lei, Z. (2021). “双高”特征下国有股权与企业绩效的关系——基于群际冲突视角。 [Study on relationship

- between state-owned equity and corporate performance under “double-high” characteristics]. *Enterprise Economy*, 04, 36–44. <https://doi.org/10.13529/j.cnki.enterprise.economy.2021.04.004>
- \* Ainoya, N. (2004). *Demographic diversity, team process, and team performance: Assessing moderator effects of cognitive conflict management practices and task interdependence* [PhD thesis]. University of Southern California.
- \* Akgün, A. E., Dayan, M., & Benedetto, A. D. (2008). New product development team intelligence: Antecedents and consequences. *Information & Management*, 45(4), 221–226. <https://doi.org/10.1016/j.im.2008.02.004>
- \* Akron, S., Feinblit, O., Hareli, S., & Tzafrir, S. S. (2016). Employment arrangements diversity and work group performance. *Team Performance Management*, 22(5/6), 310–330. <https://doi.org/10.1108/tpm-11-2015-0053>
- \* Alabduljader, N. (2018). *New venture team personality and new venture success* [PhD thesis]. The George Washington University.
- \* Alfaro, I. (2010). Nationality diversity and performance in global software development teams: The role of temporal dispersion and leadership. In *ICIS 2010 Proceedings*, 166. [https://aisel.aisnet.org/icis2010\\_submissions/166](https://aisel.aisnet.org/icis2010_submissions/166)
- Alfaro, I., & Chandrasekaran, R. (2015). Software quality and development speed in global software development teams. *Business & Information Systems Engineering*, 57(2), 91–102. <https://doi.org/10.1007/s12599-015-0372-6>
- Ali, M., & Konrad, A. M. (2017). Antecedents and consequences of diversity and equality management systems: The importance of gender diversity in the TMT and lower to middle management. *European Management Journal*, 35(4), 440–453. <https://doi.org/10.1016/j.emj.2017.02.002>
- Allport, G. W. (1954). *The Nature of Prejudice*. Addison.
- \* Altiner, S., & Ayhan, M. B. (2018). Approach for the determination and correlation of diversity and efficiency of software development teams. *South African Journal of Science*, 114(3/4), 9. <https://doi.org/10.17159/sajs.2018/20170331>
- \* Amason, A. C., Liu, J., & Fu, P. (2018). Value heterogeneity: An overlooked and important antecedent of TMT conflict and effectiveness. *Journal of Managerial Issues*, 30(2), 155–182.
- \* Amason, A. C., Shrader, R. C., & Tompson, G. H. (2006). Newness and novelty: Relating top management team composition to new venture performance. *Journal of Business Venturing*, 21(1), 125–148. <https://doi.org/10.1016/j.jbusvent.2005.04.008>
- \* Amenta, C., Ballor, C., & Betta, P. D. (2012). Managerial ability, players’ cultural diversity, and sporting and economic performance in English soccer. *International Journal of Marketing Studies*, 4(6). <https://doi.org/10.5539/ijms.v4n6p116>
- \* Amin, M., Wu, J., & Tu, R. (2019). Signaling value of top management team. *Chinese Management Studies*, 13(3), 531–549. <https://doi.org/10.1108/cms-04-2017-0097>
- \* An, S. (2021). Board diversity and monitoring: An investigation of gender and task-related diversity. *Public Performance & Management Review*, 45(1), 54–79. <https://doi.org/10.1080/15309576.2021.1914691>
- Anaya, J. (2016). The GRIMMER test: A method for testing the validity of reported measures of variability. *PeerJ Preprints*. <https://doi.org/10.7287/peerj.preprints.2400v1>
- \* Ancona, D. G., & Caldwell, D. F. (1992). Demography and design: Predictors of new product team performance. *Organization Science*, 3(3), 321–341. <https://doi.org/10.1287/orsc.3.3.321>
- \* Andresen, M., & Altmann, T. (2006). Diversity und Erfolg im Profifussball. *Zeitschrift Führung+ Organisation*, 75(6), 325–332.
- Andrews, I., & Kasy, M. (2019). Identification of and correction for publication bias. *American Economic Review*, 109(8), 2766–2794. <https://doi.org/10.1257/aer.20180310>
- \* Angriawan, A. (2009). *Top management team heterogeneities and firm performance: The moderating role of board composition* [PhD thesis]. Southern Illinois University at Carbondale.
- \* Apesteguia, J., Azmat, G., & Iriberrri, N. (2012). The impact of gender composition on team performance and decision making: Evidence from the field. *Management Science*, 58(1), 78–93. <https://doi.org/10.1287/mnsc.1110.1348>
- Appelbaum, M. (2018). Journal article reporting standards for quantitative research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73(1), 3. <https://doi.org/10.1037/amp0000191>
- \* Auden, W. C. (2005). *The implication of international risk management factor for the relationship between top management team demographic composition and firm performance* [PhD thesis]. Touro University International.
- \* Auh, S., & Menguc, B. (2006). Diversity at the executive suite: A resource-based approach to the customer orientation–organizational performance relationship. *Journal of Business Research*, 59(5), 564–572. <https://doi.org/10.1016/j.jbusres.2005.10.006>
- \* Avery, D. R., Rhue, L. A., & McKay, P. F. (2022). Setting the stage for success: How participation diversity can help teams leverage racioethnic diversity. *Journal of Management*, 49(4), 1312–1343. <https://doi.org/10.1177/01492063221082522>
- \* Ayoko, O. B., & Konrad, A. M. (2012). Leaders’ transformational, conflict, and emotion management behaviors in culturally diverse workgroups. *Equality, Diversity and Inclusion: An International Journal*, 31(8), 694–724. <https://doi.org/10.1108/0261015121277581>
- \* Bachrach, D. G., & Mullins, R. (2019). A dual-process contingency model of leadership, transactive memory systems and team performance. *Journal of Business Research*, 96, 297–308. <https://doi.org/10.1016/j.jbusres.2018.11.029>
- \* Baek, Y.-J., Jung, J.-C., & Choi, S.-K. (2002). 최고경영진의 지식 다양성과 사회책임주 다양성이 조직성과에 미치는 영향 [The impact of top management’s knowledge diversity and social category diversity on organizational performance]. *Journal of Human Resource Development Research, Human Resource Development Research*, 10(2), 1–34.
- \* Baer, M., Vadera, A. K., Leenders, R. T. A. J., & Oldham, G. R. (2014). Intergroup competition as a double-edged sword: How sex composition regulates the effects of competition on group creativity. *Organization Science*, 25(3), 892–908. <https://doi.org/10.1287/orsc.2013.0878>
- \* Balkundi, P., Kilduff, M., Barsness, Z. I., & Michael, J. H. (2007). Demographic antecedents and performance consequences of structural holes in work teams. *Journal of Organizational Behavior*, 28(2), 241–260. <https://doi.org/10.1002/job.428>
- \* Bantel, K. A. (1993). Strategic clarity in banking: Role of top management-team demography. *Psychological Reports*, 73(3), 1187–1201. <https://doi.org/10.2466/pr0.1993.73.3f.1187>
- \* Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10(S1), 107–124. <https://doi.org/10.1002/smj.4250100709>
- \* Bao, L. (2020). *Deep and diverse: Knowledge combination of team members in problem solving teams* [PhD thesis]. Case Western Reserve University.
- \* Barrick, M. R., Bradley, B. H., Kristof-Brown, A. L., & Colbert, A. E. (2007). The moderating role of top management team interdependence: Implications for real teams and working groups. *Academy of Management Journal*, 50(3), 544–557. <https://doi.org/10.5465/amj.2007.25525781>
- \* Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied*

- Psychology*, 83(3), 377–391. <https://doi.org/10.1037/0021-9010.83.3.377>
- \* Barsade, S. G., Ward, A. J., Turner, J. D. F., & Sonnenfeld, J. A. (2000). To your hearts content: A model of affective diversity in top management teams. *Administrative Science Quarterly*, 45(4), 802–836. <https://doi.org/10.2307/2667020>
- \* Basadur, M., & Milena, M. (2001). Team performance and satisfaction: A link to cognitive style within a process framework. *The Journal of Creative Behavior*, 35(4), 227–248. <https://doi.org/10.1002/j.2162-6057.2001.tb01048.x>
- \* Bass, A. E. (2019). Top management team diversity, equality, and innovation: A multilevel investigation of the health care industry. *Journal of Leadership & Organizational Studies*, 26(3), 339–351. <https://doi.org/10.1177/1548051819849008>
- \* Beckman, C. M. (2006). The influence of founding team company affiliations on firm behavior. *Academy of Management Journal*, 49(4), 741–758. <https://doi.org/10.5465/amj.2006.22083030>
- \* Beckman, C. M., Burton, M. D., & O'Reilly, C. (2007). Early teams: The impact of team demography on VC financing and going public. *Journal of Business Venturing*, 22(2), 147–173. <https://doi.org/10.1016/j.jbusvent.2006.02.001>
- \* Belderbos, R., Lokshin, B., Boone, C., & Jacob, J. (2020). Top management team international diversity and the performance of international R&D. *Global Strategy Journal*, 12(1), 108–133. <https://doi.org/10.1002/gsj.1395>
- Bell, S. T., Villado, A. J., Lukasik, M. A., Belau, L., & Briggs, A. L. (2011). Getting specific about demographic diversity variable and team performance relationships: A meta-analysis. *Journal of Management*, 37(3), 709–743. <https://doi.org/10.1177/0149206310365001>
- \* Ben-Hafaïedh, C., Micozzi, A., & Pattitoni, P. (2017). Academic spin-offs' entrepreneurial teams and performance: A subgroups approach. *The Journal of Technology Transfer*, 43(3), 714–733. <https://doi.org/10.1007/s10961-017-9623-7>
- \* Ben-Ner, A., Licht, J.-G., & Park, J. (2017). Bifurcated effects of place-of-origin diversity on individual and team performance: Evidence from ten seasons of German soccer. *Industrial Relations: A Journal of Economy and Society*, 56(4), 555–604. <https://doi.org/10.1111/irel.12188>
- \* Benoliel, P., & Somech, A. (2014). The role of leader boundary activities in enhancing interdisciplinary team effectiveness. *Small Group Research*, 46(1), 83–124. <https://doi.org/10.1177/1046496414560028>
- \* Benoliel, P., & Somech, A. (2016). Functional heterogeneity and senior management team effectiveness. *Journal of Educational Administration*, 54(4), 492–512. <https://doi.org/10.1108/jea-09-2015-0079>
- \* Bercovitz, J., & Feldman, M. (2011). The mechanisms of collaboration in inventive teams: Composition, social networks, and geography. *Research Policy*, 40(1), 81–93. <https://doi.org/10.1016/j.respol.2010.09.008>
- \* Bergh, D. D. (2001). Executive retention and acquisition outcomes: A test of opposing views on the influence of organizational tenure. *Journal of Management*, 27(5), 603–622. <https://doi.org/10.1177/014920630102700506>
- \* Berka, G., Olien, J., Rogelberg, S. G., Rupp, D. E., & Thornton, M. A. (2014). An inductive exploration of manuscript quality and publication success in small research teams. *Journal of Business and Psychology*, 29(4), 725–731. <https://doi.org/10.1007/s10869-014-9373-6>
- \* Bezrukova, K., Jehn, K. A., Zanutto, E. L., & Thatcher, S. M. B. (2009). Do workgroup faultlines help or hurt? A moderated model of faultlines, team identification, and group performance. *Organization Science*, 20(1), 35–50. <https://doi.org/10.1287/orsc.1080.0379>
- \* Bezrukova, K., Spell, C. S., Caldwell, D., & Burger, J. M. (2016). A multilevel perspective on faultlines: Differentiating the effects between group- and organizational-level faultlines. *Journal of Applied Psychology*, 101(1), 86–107. <https://doi.org/10.1037/apl0000039>
- \* Binacci, M., Peruffo, E., Oriani, R., & Minichilli, A. (2015). Are all non-family managers (NFM) equal? The impact of NFM characteristics and diversity on family firm performance. *Corporate Governance: An International Review*, 24(6), 569–583. <https://doi.org/10.1111/corg.12130>
- \* Bode, H. J. M. K., van Knippenberg, D., & van Ginkel, W. P. (2008). Ethnic diversity and distributed information in group decision making: The importance of information elaboration. *Group Dynamics: Theory, Research, and Practice*, 12(4), 307–320. <https://doi.org/10.1037/1089-2699.12.4.307>
- \* Boehm, S. A., Dwertmann, D. J. G., & McAlpine, K. L. (2021). How disability diverse teams can drive innovation through mutual perspective taking. *Academy of Management Proceedings*, 2021(1), 15451. <https://doi.org/10.5465/ambpp.2021.15451abstract>
- \* Boerner, S., Linkohr, M., & Kiefer, S. (2011). Top management team diversity: Positive in the short run, but negative in the long run? *Team Performance Management: An International Journal*, 17(7/8), 328–353. <https://doi.org/10.1108/13527591111182616>
- \* Bogilović, S., Černe, M., & Škerlavaj, M. (2017). Hiding behind a mask? Cultural intelligence, knowledge hiding, and individual and team creativity. *European Journal of Work and Organizational Psychology*, 26(5), 710–723. <https://doi.org/10.1080/1359432x.2017.1337747>
- Bohman, J. (2006). Deliberative democracy and the epistemic benefits of diversity. *Episteme*, 3(3), 175–191. <https://doi.org/10.3366/epi.2006.3.3.175>
- \* Bo-in, C., & Seok-gyun, K. (2014). 구성원성격다양성이팀성과와 만족에 미치는 영향과 변혁적 리더십의 조절 효과 [The impact of team member personality diversity on team performance and satisfaction, and the moderating effect of transformative leadership]. *Human Resource Management Research*, 21(5), 47–71.
- \* Bonyuet, D. (2019). *Impact of top management team diversity on firm innovation* [PhD thesis]. Oklahoma State University.
- \* Boone, C., & Hendriks, W. (2009). Top management team diversity and firm performance: Moderators of functional-background and locus-of-control diversity. *Management Science*, 55(2), 165–180. <https://doi.org/10.1287/mnsc.1080.0899>
- \* Boone, C., Lokshin, B., Guenter, H., & Belderbos, R. (2018). Top management team nationality diversity, corporate entrepreneurship, and innovation in multinational firms. *Strategic Management Journal*, 40(2), 277–302. <https://doi.org/10.1002/smj.2976>
- \* Boone, C., van Olfen, W., & van Witteloostuijn, A. (2005). Team locus-of-control composition, leadership structure, information acquisition, and financial performance: A business simulation study. *Academy of Management Journal*, 48(5), 889–909. <https://doi.org/10.5465/amj.2005.18803929>
- \* Boros, S., & Curşeu, P. L. (2013). 'Would you like to talk about that?' How and when group emotional awareness enhances effectiveness of gender diverse teams. *Psihologia Resursei Umane*, 11(2), 45–56.
- Bowers, C. A., Pharmer, J. A., & Salas, E. (2000). When member homogeneity is needed in work teams: A meta-analysis. *Small Group Research*, 31(3), 305–327. <https://doi.org/10.1177/104649640003100303>
- Breuer, C., Hüffmeier, J., & Hertel, G. (2016). Does trust matter more in virtual teams? A meta-analysis of trust and team effectiveness considering virtuality and documentation as moderators. *Journal of Applied Psychology*, 101, 1151–1177. <https://doi.org/10.1037/apl0000113>
- Brown, N. J. L., & Heathers, J. A. J. (2017). The GRIM test: A simple technique detects numerous anomalies in the reporting of results in psychology. *Social Psychological and Personality Science*, 8(4), 363–369. <https://doi.org/10.1177/1948550616673876>

- \* Buengeler, C., & Hartog, D. N. D. (2015). National diversity and team performance: The moderating role of interactional justice climate. *The International Journal of Human Resource Management*, 26(6), 831–855. <https://doi.org/10.1080/09585192.2014.991345>
- Bui, H., Chau, V. S., Degl'Innocenti, M., Leone, L., & Vicentini, F. (2019). The resilient organisation: A meta-analysis of the effect of communication on team diversity and team performance. *Applied Psychology: An International Review*, 68(4), 621–657. <https://doi.org/10.1111/apps.12203>
- \* Bunderson, J. S., & Sutcliffe, K. M. (2002). Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal*, 45(5), 875–893. <https://doi.org/10.5465/3069319>
- Bunderson, J. S., & Van der Vegt, G. S. (2018). Diversity and inequality in management teams: A review and integration of research on vertical and horizontal member differences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 47–73. <https://doi.org/10.1146/annurev-orgpsych-032117-104500>
- \* Burris, J. W. (2001). *The impact of gender diversity on technical team effectiveness* [PhD thesis]. University of South Florida.
- \* Busse, R. (2018). Rethinking femininity in organisations: Experimental insights into team composition. *Journal of Management & Organization*, 26(5), 866–879. <https://doi.org/10.1017/jmo.2018.52>
- \* Cady, S. H., & Valentine, J. (1999). Team innovation and perceptions of consideration. *Small Group Research*, 30(6), 730–750. <https://doi.org/10.1177/104649649903000604>
- \* Cahill, A. M. (2011). *Use of teams to accomplish radical organization change: Examining the influence of team cognitive style and leader emotional intelligence* [PhD thesis]. Columbia University.
- \* Cai, L., Liu, Q., & Yu, X. (2013). Effects of top management team heterogeneous background and behavioural attributes on the performance of new ventures. *Systems Research and Behavioral Science*, 30(3), 354–366. <https://doi.org/10.1002/sres.2176>
- \* Camelo, C., Fernández-Alles, M., & Hernández, A. B. (2010). Strategic consensus, top management teams, and innovation performance. *International Journal of Manpower*, 31(6), 678–695. <https://doi.org/10.1108/01437721011073373>
- \* Cannella, A. A., Park, J.-H., & Lee, H.-U. (2008). Top management team functional background diversity and firm performance: Examining the roles of team member collocation and environmental uncertainty. *Academy of Management Journal*, 51(4), 768–784. <https://doi.org/10.5465/amj.2008.33665310>
- \* Carbonell, P., & Escudero, A. I. R. (2022). Boosting the confidence of new product development teams: The role of team boundary spanning, team size and functional diversity. *Creativity and Innovation Management*, 32(1), 100–116. <https://doi.org/10.1111/caim.12532>
- \* Carls, T. B., & Boehm, S. A. (2022). Age diversity as a risk factor for psychological safety in teams of older employees. *Academy of Management Proceedings*, 2022(1). <https://doi.org/10.5465/ambpp.2022.17907abstract>
- \* Carnicer, P. D. L., Sanchez, A. M., Perez, M., & Jimenez, M. J. V. (2005). Team empowerment: An empirical study in Spanish University R&D teams. *International Journal of Human Resources Development and Management*, 5(1), 69. <https://doi.org/10.1504/ijhrdm.2005.005986>
- \* Carpenter, M. A. (2002). The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, 23(3), 275–284. <https://doi.org/10.1002/smj.226>
- \* Carpenter, M. A., & Fredrickson, J. W. (2001). Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of Management Journal*, 44(3), 533–545. <https://doi.org/10.2307/3069368>
- \* Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50(5), 1217–1234. <https://doi.org/10.2307/20159921>
- \* Castellaneta, F., & Salvato, C. (2018). Culminating events and time working together in top management teams: Insights from private equity. *Long Range Planning*, 51(6), 865–880. <https://doi.org/10.1016/j.lrp.2017.08.006>
- \* Chaganti, R. S., Watts, A. D., Chaganti, R., & Zimmerman-Treichel, M. (2008). Ethnic-immigrants in founding teams: Effects on prospector strategy and performance in new Internet ventures. *Journal of Business Venturing*, 23(1), 113–139. <https://doi.org/10.1016/j.jbusvent.2006.07.004>
- \* Chaganti, R. S., Zimmerman, M. A., Kumaraswamy, A., Maggitti, P., & Arkles, J. B. (2016). TMT characteristics, time-to-IPO and firm performance. *Journal of Management and Public Policy*, 7(2), 37–56.
- Chamberlain, S., Zhu, H., Jahn, N., Boettiger, C., & Ram, K. (2022). *rcrossref: Client for Various "CrossRef" "APIs."* R package version 1.2.0. <https://doi.org/10.32614/CRAN.package.rcrossref>
- \* Chan, T. H., Liu, H., Keck, S., & Tang, W. (2023). When do teams generate valuable inventions? The moderating role of invention integrality on the effects of expertise similarity, network cohesion, and gender diversity. *Production and Operations Management*, 32(6), 1760–1777. <https://doi.org/10.1111/poms.13939>
- \* Chandra, L. A. (2014). 高階管理團隊的多元背景, 企業的策略架構, 和績效: 以台灣電子製造業的研究為例 [Top management team heterogeneity, strategy configuration, and performance: A study of Taiwan's electronics manufacturing industry] [Master's thesis]. Chungli, Taiwan.
- \* Chang, C.-F. (2005). *The impacts of top management team characteristics and entrepreneurial orientation on management competence and performance* [Master's thesis]. National Cheng Kung University.
- \* Chang, Y. (2012). 團隊潛在斷層與活性斷層間關係及其影響性研究—以認知衝突、工作價值觀多元化與集體主義為干擾變數 [A study of the influence of dormant faultlines and activated faultlines in teams: Cognitive conflict, work value and collectivism as moderators] [Master's thesis]. Providence University.
- \* Chang, Y.-K., Hughes, L. C., & Mark, B. (2006). Fitting in or standing out. *Nursing Research*, 55(6), 373–380. <https://doi.org/10.1097/00006199-200611000-00001>
- \* Chao, J.-Y. (2011). 實際與知覺多元化對團隊創新影響之探討—以任務相依性和多元化開放性為干擾變數 [A research of the relations among actual diversity, perceived diversity and team innovation-Task interdependence and openness to diversity as moderators] [Master's thesis]. Chung Yuan University.
- Charlesworth, T. E. S., & Banaji, M. R. (2019). Patterns of implicit and explicit attitudes: I. Long-term change and stability from 2007 to 2016. *Psychological Science*, 30(2), 174–192. <https://doi.org/10.1177/0956797618813087>
- Charlesworth, T. E. S., & Banaji, M. R. (2021). Patterns of implicit and explicit stereotypes III: Long-term change in gender stereotypes. *Social Psychological and Personality Science*, 1948550620988425. <https://doi.org/10.1177/1948550620988425>
- \* Chatman, J. A., Greer, L. L., Sherman, E., & Doerr, B. (2019). Blurred lines: How the collectivism norm operates through perceived group diversity to boost or harm group performance in Himalayan mountain climbing. *Organization Science*, 30(2), 235–259. <https://doi.org/10.1287/orsc.2018.1268>
- \* Chatzi, S., Nikolaou, I., & Anderson, N. (2022). Team personality composition and team innovation implementation: The mediating role of team climate for innovation. *Applied Psychology*, 72(2), 769–796. <https://doi.org/10.1111/apps.12408>
- \* Chen, C.-J., Hsiao, Y.-C., Chu, M.-A., & Hu, K.-K. (2015). The relationship between team diversity and new product performance: The moderating role of organizational slack. *IEEE Transactions*



- on *Engineering Management*, 62(4), 568–577. <https://doi.org/10.1109/tem.2015.2458891>
- \* Chen, H., Liang, Q., & Zhang, Y. (2019). Facilitating or inhibiting? *Chinese Management Studies*, 13(4), 802–819. <https://doi.org/10.1108/cms-06-2018-0563>
- \* Chen, L., Zhou, Y., Luo, X., Chen, S., & Cao, Y. (2022). Activating the different sides of top management team faultlines in enterprise sustainable development: Is environmental responsibility a burden or boost to small and medium-sized enterprises in China? *Business Strategy and the Environment*, 32(6), 3053–3072. <https://doi.org/10.1002/bse.3286>
- \* Chen, S. (2016). 团队断裂带对团队绩效的影响:团队交互记忆系统的作用 [The influence of team faultlines on team performance: Mediating effect of team transactive memory system]. *Acta Psychologica Sinica*, 48(1), 84–94. <https://doi.org/10.3724/sp.j.1041.2016.00084>
- \* Chen, S., Wang, W., Cheng, J., & Teng, D. (2020). Activating the benefit of diversity through team role clarity and implicit coordination. *Small Group Research*, 52(4), 379–404. <https://doi.org/10.1177/1046496420958131>
- \* Chen, W. (2007). 高管层团队人口特征与公司业绩关系的实证研究 [An empirical study on the relationship between demographic characteristics of top management teams and corporate performance]. *Journal of Nanjing University of Posts and Telecommunications (Social Sciences)*, 9(1), 23–27.
- \* Chen, W.-H., Kang, M.-P., & Butler, B. (2019). How does top management team composition matter for continual growth? Reinvestigating Penrose's growth theory through the lens of upper echelons theory. *Management Decision*, 57(1), 41–70. <https://doi.org/10.1108/md-02-2017-0147>
- \* Chen, W.-H., & Liu, Y.-Y. (2018). How does top management team diversity matter in abruptly dynamic environments? *Journal of Business Economics and Management*, 19(3), 521–543. <https://doi.org/10.3846/jbem.2018.6579>
- \* Chen, Y., He, Y.-Q., & Chen, X.-J. (2011). TMT特征对多元化与企业绩效关系的调节效应研究 [Research on the moderating effect of TMT characteristics on the relationship between diversification and corporate performance]. *Forecasting*, 30(1), 10–17.
- \* Cheng, C.-Y., Chua, R. Y. J., Morris, M. W., & Lee, L. (2012). Finding the right mix: How the composition of self-managing multicultural teams cultural value orientation influences performance over time. *Journal of Organizational Behavior*, 33(3), 389–411. <https://doi.org/10.1002/job.1777>
- \* Cheung, S. Y., Gong, Y., Wang, M., Zhou, L. (Betty), & Shi, J. (2016). When and how does functional diversity influence team innovation? The mediating role of knowledge sharing and the moderation role of affect-based trust in a team. *Human Relations*, 69(7), 1507–1531. <https://doi.org/10.1177/0018726715615684>
- \* Chi, N.-W., Huang, Y.-M., & Lin, S.-C. (2009). A double-edged sword? Exploring the curvilinear relationship between organizational tenure diversity and team innovation: The moderating role of team-oriented HR practices. *Group & Organization Management*, 34(6), 698–726. <https://doi.org/10.1177/1059601109350985>
- \* Chi-Hsia, H. (2016). 多工作業多元性對工作團體績效與成員壓力反應之影響:時間規劃的跨層次調節效果 [The influence of polychronicity diversity on work group performance and group members' stress: The cross-level moderating effect of temporal planning] [Master's thesis]. National Chengchi University.
- Cho, Y. (2022). Team diversity, perspective taking, and employee creativity: The importance of psychological safety. *Social Behavior and Personality: An International Journal*, 50(2), 1–11. <https://doi.org/10.2224/sbp.11042>
- Choi, M. S., & Jarrott, S. E. (2021). Application of intergroup contact theory to managing age-diverse teams. *Journal of Intergenerational Relationships*, 19(3), 377–391. <https://doi.org/10.1080/15350770.2020.1753621>
- Chua, R. Y. J. (2013). The costs of ambient cultural disharmony: Indirect intercultural conflicts in social environment undermine creativity. *Academy of Management Journal*, 56(6), 1545–1577. <https://doi.org/10.5465/amj.2011.0971>
- \* Chul, W., Kim. (2010). 팀 다양성과 팀 공유감이 팀 효과성에 미치는 영향에 관한 연구 -팀 학습의 매개효과를 중심으로-[A study on the impact of team diversity and team cohesion on team effectiveness—Focusing on the mediating effect of team learning] [PhD thesis]. Ewha Womans University Graduate School.
- \* Chun, J. S., & Choi, J. N. (2014). Members' needs, intragroup conflict, and group performance. *Journal of Applied Psychology*, 99(3), 437–450. <https://doi.org/10.1037/a0036363>
- \* Chung, D., Cho, T. S., & Kang, J. (2018). The linkage between TMT knowledge diversity and firm-level innovation: The role of organisational search scope and managerial discretion. *International Journal of Technology Management*, 78(3), 208. <https://doi.org/10.1504/ijtm.2018.095631>
- \* Chung, M.-H., Ko, Y., & Kim, J.-Y. (2019). Group power structure, inter-subgroup cross-dependency, and work group performance. *Asia Pacific Journal of Management*, 37(1), 297–323. <https://doi.org/10.1007/s10490-018-9627-3>
- \* Colbert, A. E., Barrick, M. R., & Bradley, B. H. (2013). Personality and leadership composition in top management teams: Implications for organizational effectiveness. *Personnel Psychology*, 67(2), 351–387. <https://doi.org/10.1111/peps.12036>
- \* Cooper, D., Patel, P. C., & Thatcher, S. M. B. (2014). It depends: Environmental context and the effects of faultlines on top management team performance. *Organization Science*, 25(2), 633–652. <https://doi.org/10.1287/orsc.2013.0855>
- Cross, R., Rebele, R., & Grant, A. (2016). Collaborative overload. *Harvard Business Review*, 94(1), 16.
- \* Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management Science*, 50(3), 352–364. <https://doi.org/10.1287/mnsc.1030.0134>
- \* Cunningham, G. B. (2007). Opening the black box: The influence of perceived diversity and a common in-group identity in diverse groups. *Journal of Sport Management*, 21(1), 58–78. <https://doi.org/10.1123/jsm.21.1.58>
- \* Curşeu, P. L. (2010). Team creativity in web site design: An empirical test of a systemic model. *Creativity Research Journal*, 22(1), 98–107. <https://doi.org/10.1080/10400410903579635>
- \* Curşeu, P. L., Raab, J., Han, J., & Loenen, A. (2012). Educational diversity and group effectiveness: A social network perspective. *Journal of Managerial Psychology*, 27(6), 576–594. <https://doi.org/10.1108/02683941211252437>
- \* Dahlan, M., Al-Atwi, A. A., Alshaibani, E., Bakir, A., & Maher, K. (2021). Diverse group effectiveness: Co-occurrence of task and relationship conflict, and TFL. *Academy of Management Proceedings*, 2021(1), 11751. <https://doi.org/10.5465/ambpp.2021.11751abstract>
- \* Dahms, S., Cabrilo, S., & Kingkaew, S. (2022). Configuring subsidiary performance in ambidextrous networks: The role of top management team diversity and autonomy. *Thunderbird International Business Review*, 64(5), 405–427. <https://doi.org/10.1002/tie.22262>
- \* Dahms, S., & Kingkaew, S. (2019). A configurational perspective on subsidiary top management team national diversity and performance. *Personnel Review*, 48(6), 1507–1529. <https://doi.org/10.1108/pr-10-2018-0389>
- \* Dai, Y., Byun, G., & Ding, F. (2018). The direct and indirect impact of gender diversity in new venture teams on innovation performance. *Entrepreneurship Theory and Practice*, 43(3), 505–528. <https://doi.org/10.1177/1042258718807696>
- \* Dan, Y. (2017). 高管团队异质性、企业社会责任信息披露与财务绩效 [Heterogeneity of the management team, corporate social responsibility information disclosure and financial performance] [Master's thesis]. China University of Mining and Technology.

- \* Daniel, S., Agarwal, R., & Stewart, K. J. (2013). The effects of diversity in global, distributed collectives: A study of open source project success. *Information Systems Research*, 24(2), 312–333. <https://doi.org/10.1287/isre.1120.0435>
- \* Daniel, S., Midha, V., Bhattacharjee, A., & Singh, S. P. (2018). Sourcing knowledge in open source software projects: The impacts of internal and external social capital on project success. *The Journal of Strategic Information Systems*, 27(3), 237–256. <https://doi.org/10.1016/j.jsis.2018.04.002>
- \* Darmadi, S. (2013). Do women in top management affect firm performance? Evidence from Indonesia. *Corporate Governance: The International Journal of Business in Society*, 13(3), 288–304. <https://doi.org/10.1108/cg-12-2010-0096>
- \* Dayan, M., & Benedetto, C. A. D. (2010). The impact of structural and contextual factors on trust formation in product development teams. *Industrial Marketing Management*, 39(4), 691–703. <https://doi.org/10.1016/j.indmarman.2010.01.001>
- \* Dayan, M., Elbanna, S., & Benedetto, A. D. (2012). Antecedents and consequences of political behavior in new product development teams. *IEEE Transactions on Engineering Management*, 59(3), 470–482. <https://doi.org/10.1109/tem.2011.2166078>
- \* Dayan, M., Ozer, M., & Almazrouei, H. (2017). The role of functional and demographic diversity on new product creativity and the moderating impact of project uncertainty. *Industrial Marketing Management*, 61, 144–154. <https://doi.org/10.1016/j.indmarman.2016.04.016>
- De Jong, B. A., Dirks, K. T., & Gillespie, N. (2016). Trust and team performance: A meta-analysis of main effects, moderators, and covariates. *Journal of Applied Psychology*, 101, 1134–1150. <https://doi.org/10.1037/apl0000110>
- \* De Jong, B., Gillespie, N., Williamson, I., & Gill, C. (2021). Trust consensus within culturally diverse teams: A multistudy investigation. *Journal of Management*, 47(8), 2135–2168. <https://doi.org/10.1177/0149206320943658>
- \* de Poel, F. M., Stoker, J. I., & der Zee, K. I. V. (2014). Leadership and organizational tenure diversity as determinants of project team effectiveness. *Group & Organization Management*, 39(5), 532–560. <https://doi.org/10.1177/1059601114550711>
- \* DeBode, J. D. (2014). *Diversity in the executive suite: A longitudinal examination of the antecedents and consequences of top management team heterogeneity* [PhD thesis]. Auburn University.
- \* del Carmen Triana, M., Richard, O. C., & Su, W. (2019). Gender diversity in senior management, strategic change, and firm performance: Examining the mediating nature of strategic change in high tech firms. *Research Policy*, 48(7), 1681–1693. <https://doi.org/10.1016/j.respol.2019.03.013>
- \* DeLia, E. (2011). *Complexity leadership in industrial innovation teams: A field study of leading, learning and innovating in heterogeneous teams* [PhD thesis]. Rutgers The State University of New Jersey.
- \* Deng, X., Tang, N., & Deng, P. (2019). 汽车行业上市公司高管特征与财务绩效关系研究——以股权集中度为调节变量 [Study on the relationship between executive characteristics and financial performance of listed companies in the automotive industry—With equity concentration as a moderating variable]. *Finance and Accounting Communications*, 21, 79–82+114.
- \* Deok-seop, S., & Dong-min, Y. (2008). 팀 구성, 팀 프로세스, 성과 사이의 관계에 대한 연구 [A study of relationship among team structure, team process, and performance]. *Korean Management Association*, 1–30. <https://doi.org/10.32614/CRAN.package.rcrossref>
- Dezsö, C. L., & Ross, D. G. (2012). Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal*, 33(9), 1072–1089. <https://doi.org/10.1002/smj.1955>
- \* Díaz-Fernández, M. C., González-Rodríguez, M. R., & Paddison, B. (2015). Exploring the antecedents of firm performance in a Latin-American and European diverse industrial context. *Academia Revista Latinoamericana de Administración*, 28(4), 502–522. <https://doi.org/10.1108/arla-02-2015-0037>
- \* Díaz-Fernández, M. C., González-Rodríguez, M. R., & Pawlak, M. (2014). Top management demographic characteristics and company performance. *Industrial Management & Data Systems*, 114(3), 365–386. <https://doi.org/10.1108/imds-04-2013-0210>
- \* Díaz-Fernández, M. C., González-Rodríguez, M. R., & Simonetti, B. (2016). The role played by job and non-job-related TMT diversity traits on firm performance and strategic change. *Management Decision*, 54(5), 1110–1139. <https://doi.org/10.1108/md-10-2015-0464>
- \* Díaz-García, C., González-Moreno, A., & Sáez-Martínez, F. J. (2013). Gender diversity within R&D teams: Its impact on radicalness of innovation. *Innovation*, 15(2), 149–160. <https://doi.org/10.5172/impp.2013.15.2.149>
- \* Dipboye, R. L. (1991). Size, functional heterogeneity, and teamwork quality predict team creativity and innovation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2929009>
- \* Donati, S. (2013). *An input-process-output approach to interorganizational teams: The influence of work group diversity, trust and shared leadership on communication network and team outputs* [PhD thesis]. Alma Mater Studiorum Università di Bologna.
- \* Drach-Zahavy, A., & Somech, A. (2001). Understanding team innovation: The role of team processes and structures. *Group Dynamics: Theory, Research, and Practice*, 5(2), 111–123. <https://doi.org/10.1037/1089-2699.5.2.111>
- \* Drach-Zahavy, A., & Somech, A. (2002). Team heterogeneity and its relationship with team support and team effectiveness. *Journal of Educational Administration*, 40(1), 44–66. <https://doi.org/10.1108/09578230210415643>
- Duarte, J. L., Crawford, J. T., Stern, C., Haidt, J., Jussim, L., & Tetlock, P. E. (2015). Political diversity will improve social psychological science. *Behavioral and Brain Sciences*, 38, e130. <https://doi.org/10.1017/S0140525X14000430>
- \* Dulaimi, M., & Hariz, A. (2011). The impact of cultural diversity on the effectiveness of construction project teams. *Engineering Project Organization Journal*, 1(4), 213–221. <https://doi.org/10.1080/21573727.2011.621419>
- \* Dyaram, L., & Kamalanabhan, T. J. (2011). Impact of heterogeneity on software development teams. *International Journal of Business Innovation and Research*, 5(4), 271. <https://doi.org/10.1504/ijbir.2011.041051>
- \* Earley, P. C., & Mosakowski, E. (2000). Creating hybrid team cultures: An empirical test of transnational team functioning. *Academy of Management Journal*, 43(1), 26–49. <https://doi.org/10.2307/1556384>
- \* Ehimare, O. A., & Ogaga-Oghene, J. O. (2011). The impact of workforce diversity on organizational effectiveness: A study of a Nigerian bank. *Annals of the University of Petrosani. Economics*, 11, 93–110.
- \* Eigel, K. M., & Kuhnert, K. W. (n.d.). Personality diversity and its relationship to managerial team productivity. In *Selected research on work team diversity*. (pp. 75–98). American Psychological Association. <https://doi.org/10.1037/10507-004>
- \* Eisenberg, J., Post, C., & DiTomaso, N. (2019). Team dispersion and performance: The role of team communication and transformational leadership. *Small Group Research*, 50(3), 348–380. <https://doi.org/10.1177/1046496419827376>
- \* Eisend, M. (2016). International diversity of authorship in advertising research. *International Journal of Advertising*, 36(1), 3–10. <https://doi.org/10.1080/02650487.2016.1231970>
- \* Ekasingh, E., Simnett, R., & Green, W. J. (2018). The effect of diversity and the mediating role of elaboration on multidisciplinary greenhouse gas assurance team effectiveness. *Behavioral*

- Research in Accounting*, 31(1), 81–96. <https://doi.org/10.2308/bria-52285>
- Ellington, E. H., Bastille-Rousseau, G., Austin, C., Landolt, K. N., Pond, B. A., Rees, E. E., Robar, N., & Murray, D. L. (2015). Using multiple imputation to estimate missing data in meta-regression. *Methods in Ecology and Evolution*, 6(2), 153–163. <https://doi.org/10.1111/2041-210X.12322>
- \* Elron, E. (1997). Top management teams within multinational corporations: Effects of cultural heterogeneity. *The Leadership Quarterly*, 8(4), 393–412. [https://doi.org/10.1016/s1048-9843\(97\)90021-7](https://doi.org/10.1016/s1048-9843(97)90021-7)
- \* Ely, R. J. (2004). A field study of group diversity, participation in diversity education programs, and performance. *Journal of Organizational Behavior*, 25(6), 755–780. <https://doi.org/10.1002/job.268>
- \* Ely, R. J., Padavic, I., & Thomas, D. A. (2012). Racial diversity, racial asymmetries, and team learning environment: Effects on performance. *Organization Studies*, 33(3), 341–362. <https://doi.org/10.1177/0170840611435597>
- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229–273. <https://doi.org/10.2307/2667087>
- Ely, R. J., & Thomas, D. A. (2020). Getting serious about diversity: Enough already with the business case. *Harvard Business Review*. <https://hbr.org/2020/11/getting-serious-about-diversity-enough-already-with-the-business-case>. Accessed 20 December 2022.
- \* Ensley, M. D., & Hmieleski, K. M. (2005). A comparative study of new venture top management team composition, dynamics and performance between university-based and independent start-ups. *Research Policy*, 34(7), 1091–1105. <https://doi.org/10.1016/j.respol.2005.05.008>
- Ertug, G., Brennecke, J., Kovács, B., & Zou, T. (2022). What does homophily do? A review of the consequences of homophily. *Academy of Management Annals*, 16(1), 38–69. <https://doi.org/10.5465/annals.2020.0230>
- Fanelli, D., Wong, J., & Moher, D. (2021). What difference might retractions make? An estimate of the potential epistemic cost of retractions on meta-analyses. *Accountability in Research*, 0(0), 1–18. <https://doi.org/10.1080/08989621.2021.1947810>
- \* Fay, D., Borrill, C., Amir, Z., Haward, R., & West, M. A. (2006). Getting the most out of multidisciplinary teams: A multi-sample study of team innovation in health care. *Journal of Occupational and Organizational Psychology*, 79(4), 553–567. <https://doi.org/10.1348/096317905x72128>
- \* Feng, C., & Fay, S. (2021). Chief stores officer and retailer performance. *Journal of Retailing and Consumer Services*, 58, 102321. <https://doi.org/10.1016/j.jretconser.2020.102321>
- \* Ferriani, S., Cattani, G., & Baden-Fuller, C. (2009). The relational antecedents of project-entrepreneurship: Network centrality, team composition and project performance. *Research Policy*, 38(10), 1545–1558. <https://doi.org/10.1016/j.respol.2009.09.001>
- \* Ferrier, W. J., & Lyon, D. W. (2004). Competitive repertoire simplicity and firm performance: The moderating role of top management team heterogeneity. *Managerial and Decision Economics*, 25(6–7), 317–327. <https://doi.org/10.1002/mde.1193>
- Fillon, A., & Feldman, G. (2021). *Correlational meta-analysis Registered Report template*. OSF Preprint. <https://doi.org/10.17605/OSF.IO/F85UY>
- \* Fisher, D. M., Bell, S. T., Dierdorff, E. C., & Belohlav, J. A. (2012). Facet personality and surface-level diversity as team mental model antecedents: Implications for implicit coordination. *Journal of Applied Psychology*, 97(4), 825–841. <https://doi.org/10.1037/a0027851>
- \* Foo, M. D., Wong, P. K., & Ong, A. (2005). Do others think you have a viable business idea? Team diversity and judges evaluation of ideas in a business plan competition. *Journal of Business Venturing*, 20(3), 385–402. <https://doi.org/10.1016/j.jbusvent.2004.04.001>
- Foo, M.-D. (1999). *Team design and performance: A study of short-term entrepreneurial teams* [PhD thesis]. Massachusetts Institute of Technology.
- \* Foo, M.-D. (2009). Teams developing business ideas: How member characteristics and conflict affect member-rated team effectiveness. *Small Business Economics*, 36(1), 33–46. <https://doi.org/10.1007/s11187-009-9176-8>
- \* Friedlander, F. (1966). Performance and interactional dimensions of organizational work groups. *Journal of Applied Psychology*, 50(3), 257–265. <https://doi.org/10.1037/h0023361>
- \* Fritzsche, L., Wegge, J., Schmauder, M., Kliegel, M., & Schmidt, K.-H. (2014). Good ergonomics and team diversity reduce absenteeism and errors in car manufacturing. *Ergonomics*, 57(2), 148–161. <https://doi.org/10.1080/00140139.2013.875597>
- \* Fu, X. (2016). 战略柔性与企业绩效: 高层管理团队异质性的调节机制研究 [Strategic flexibility and corporate performance: A study of the moderating mechanisms of top management team diversity] [Master's thesis]. Nanjing University.
- \* Gander, F., Gaitzsch, I., & Ruch, W. (2020). The relationships of team role- and character strengths-balance with individual and team-level satisfaction and performance. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.566222>
- \* García-Granero, A., Fernández-Mesa, A., Jansen, J. J. P., & Vega-Jurado, J. (2018). Top management team diversity and ambidexterity: The contingent role of shared responsibility and CEO cognitive trust. *Long Range Planning*, 51(6), 881–893. <https://doi.org/10.1016/j.lrp.2017.11.001>
- Gasparrini, A., Armstrong, B., & Kenward, M. G. (2012). Multivariate meta-analysis for non-linear and other multiparameter associations. *Statistics in Medicine*, 31(29), 3821–3839. <https://doi.org/10.1002/sim.5471>
- \* Gellert, F. J., & Kuipers, B. S. (2008). Short- and long-term consequences of age in work teams. *Career Development International*, 13(2), 132–149. <https://doi.org/10.1108/13620430810860549>
- Gelman, A., & Loken, E. (2014). The statistical crisis in science: Data-dependent analysis – A “garden of forking paths” – explains why many statistically significant comparisons don’t hold up. *American Scientist*, 102(6), 460–466.
- \* Gerhards, J., Mutz, M., & Wagner, G. G. (2014). Die Berechnung des Siegers: Marktwert, Ungleichheit, Diversität und Routine als Einflussfaktoren auf die Leistung professioneller Fußballteams [Predictable Winners. Market Value, Inequality, Diversity, and Routine as Predictors of Success in European Soccer Leagues.]. *Zeitschrift für Soziologie*, 43(3), 231–250.
- \* Gevers, J. M., & Claessens, B. J. (2008). Pacing styles, personality and performance. In *Time in organizational research* (pp. 102–124). Routledge.
- \* Gevers, J. M. P., Driedonks, B. A., Jelinek, M., & van Weele, A. J. (2015). Functional diversity appropriateness. *Journal of Managerial Psychology*, 30(6), 709–725. <https://doi.org/10.1108/jmp-01-2012-0020>
- \* Giambatista, R. C., & Bhappu, A. D. (2010). Diversity’s harvest: Interactions of diversity sources and communication technology on creative group performance. *Organizational Behavior and Human Decision Processes*, 111(2), 116–126. <https://doi.org/10.1016/j.obhdp.2009.11.003>
- \* Gibson, C. B., & Gibbs, J. L. (2006). Unpacking the concept of virtuality: The effects of geographic dispersion, electronic dependence, dynamic structure, and national diversity on team

- innovation. *Administrative Science Quarterly*, 51(3), 451–495. <https://doi.org/10.2189/asqu.51.3.451>
- \* Gibson, C. B., & Saxton, T. (2005). Thinking outside the black box. *Small Group Research*, 36(2), 208–236. <https://doi.org/10.1177/1046496404270376>
- \* Gil, A. (2009). *Top management team heterogeneity, global strategic posture, and firm performance: Evidence from MNEs headquartered around the world* [PhD thesis]. The University of Texas at El Paso.
- \* Gil, A., Brouthers, L. E., & Keig, D. L. (2019). Top management team diversity, individualism–collectivism, and MNE performance. *International Journal of Cross Cultural Management*, 19(3), 273–290. <https://doi.org/10.1177/1470595819870819>
- \* Gong, Y. (2006). The impact of subsidiary top management team national diversity on subsidiary performance: Knowledge and legitimacy perspectives. *Management International Review*, 46(6), 771–790. <https://doi.org/10.1007/s11575-006-0126-2>
- Gonzalez-Mulé, E., & Aguinis, H. (2018). Advancing theory by assessing boundary conditions with metaregression: A critical review and best-practice recommendations. *Journal of Management*, 44(6), 2246–2273. <https://doi.org/10.1177/01492063177110723>
- \* Gossaye, K. (2022). *Is there a Right—Or Left—Way to manage diversity? Effects of political ideology on diversity outcomes in US businesses* [PhD thesis]. Drexel University.
- Goyal, S., & Shrivastava, D. S. (2013). Organizational diversity climate: Review of models and measurement. *Journal of Business Management*, 2(2319), 8.
- \* Graff, D. (2022). The impact of graduate student goal orientation on design projects. *Journal of Engineering Design*, 33(5), 388–411. <https://doi.org/10.1080/09544828.2022.2076556>
- \* Graham, M. E., Walia, B., & Robinson, C. (2020). Women executives and off-the-job misconduct by high-profile employees: A study of National Football League team organizations. *Journal of Organizational Behavior*, 41(9), 815–829. <https://doi.org/10.1002/job.2476>
- \* Greening, D. W., & Johnson, R. A. (1997). Managing industrial and environmental crises. *Business & Society*, 36(4), 334–361. <https://doi.org/10.1177/000765039703600402>
- \* Greer, L. L., Homan, A. C., Hoogh, A. H. B. D., & Hartog, D. N. D. (2012). Tainted visions: The effect of visionary leader behaviors and leader categorization tendencies on the financial performance of ethnically diverse teams. *Journal of Applied Psychology*, 97(1), 203–213. <https://doi.org/10.1037/a0025583>
- GROBID. (2008). GitHub. <https://github.com/kermitt2/grobid>. Accessed 20 Dec 2022.
- \* Groves, K. S., & Feyerherm, A. E. (2011). Leader cultural intelligence in context. *Group & Organization Management*, 36(5), 535–566. <https://doi.org/10.1177/1059601111415664>
- Gu, J., & Wang, Y. (2015). 高管团队人力资本异质性与企业绩效相关性研究——基于高科技上市公司的数据 [A study on the correlation between executive team human capital heterogeneity and corporate performance—Based on data from high-tech listed companies]. *Financial and Accounting Newsletter*, 21, 54–56+70.
- \* Guardela, J. V. (2018). *Déterminants de l'innovation au travail: It's a time of diversity. [Determinants of innovation at work: The moderating role of team diversity]* [PhD thesis]. University of Bordeaux.
- Guillaume, Y. R. F., Brodbeck, F. C., & Riketta, M. (2012). Surface- and deep-level dissimilarity effects on social integration and individual effectiveness related outcomes in work groups: A meta-analytic integration. *Journal of Occupational and Organizational Psychology*, 85(1), 80–115. <https://doi.org/10.1111/j.2044-8325.2010.02005.x>
- \* Guinan, P. J., Coopridge, J. G., & Faraj, S. (1998). Enabling software development team performance during requirements definition: A behavioral versus technical approach. *Information Systems Research*, 9(2), 101–125. <https://doi.org/10.1287/isre.9.2.101>
- \* Guo, B., Pang, X., & Li, W. (2017). The role of top management team diversity in shaping the performance of business model innovation: A threshold effect. *Technology Analysis & Strategic Management*, 30(2), 241–253. <https://doi.org/10.1080/09537325.2017.1300250>
- \* Guo, W., Gan, C., & Wang, D. (2020). The mobility of team members and team creativity: Exploring the mediating role of team cognition. *Journal of Organizational Change Management*, 33(6), 1111–1122. <https://doi.org/10.1108/jocm-03-2020-0073>
- \* Guo, W., Gan, C., & Wang, D. (2021). When does educational level diversity foster team creativity? Exploring the moderating roles of task and personnel variability. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.585849>
- Hair, K., Bahor, Z., Macleod, M., Liao, J., Sena, E. S. (2021). The Automated Systematic Search Deduplicator (ASySD): A rapid, open-source, interoperable tool to remove duplicate citations in biomedical systematic reviews. bioRxiv. <https://doi.org/10.1101/2021.05.04.442412>
- \* Halebian, J., & Finkelstein, S. (1993). Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Journal*, 36(4), 844–863. <https://doi.org/10.5465/256761>
- \* Halfhill, T., Nielsen, T. M., Sundstrom, E., & Weillbaeher, A. (2005). Group personality composition and performance in military service teams. *Military Psychology*, 17(1), 41–54. [https://doi.org/10.1207/s15327876mp1701\\_4](https://doi.org/10.1207/s15327876mp1701_4)
- \* Hambrick, D. C., Cho, T. S., & Chen, M.-J. (1996). The influence of top management team heterogeneity on firms competitive moves. *Administrative Science Quarterly*, 41(4), 659. <https://doi.org/10.2307/2393871>
- \* Hambrick, D. C., Humphrey, S. E., & Gupta, A. (2014). Structural interdependence within top management teams: A key moderator of upper echelons predictions. *Strategic Management Journal*, 36(3), 449–461. <https://doi.org/10.1002/smj.2230>
- \* Han, J. (2016). 高層管理團隊多元化與家族企業績效之關係研究:以中國家族企業為例 [The influence of top management team diversity on family firm performance: Evidence from Chinese family firms] [Unpublished Master's Thesis]. National Chengchi University.
- \* Han, S. J., Kim, M., Beyerlein, M., & DeRosa, D. (2020). Leadership role effectiveness as a mediator of team performance in new product development virtual teams. *Journal of Leadership Studies*, 13(4), 20–36. <https://doi.org/10.1002/jls.21677>
- \* Hansen, E., Conroy, K., Toppinen, A., Bull, L., Kutnar, A., & Panwar, R. (2016). Does gender diversity in forest sector companies matter? *Canadian Journal of Forest Research*, 46(11), 1255–1263. <https://doi.org/10.1139/cjfr-2016-0040>
- Harrer, M., Cuijpers, P., A, F. T., & Ebert, D. D. (2021). *Doing meta-analysis with R: A hands-on guide* (1st ed.). Chapman & Hall/CRC Press.
- Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32(4), 1199–1228. <https://doi.org/10.5465/amr.2007.26586096>
- Harvey, S. (2013). A different perspective: The multiple effects of deep level diversity on group creativity. *Journal of Experimental Social Psychology*, 49(5), 822–832. <https://doi.org/10.1016/j.jesp.2013.04.004>
- \* Hassall, S. L. (2009). *The relationship between communication and team performance: Testing moderators and identifying communication profiles in established work teams* [PhD thesis]. Queensland University of Technology.
- \* Hayton, J. C. (2005). Competing in the new economy: The effect of intellectual capital on corporate entrepreneurship in

- high-technology new ventures. *R and D Management*, 35(2), 137–155. <https://doi.org/10.1111/j.1467-9310.2005.00379.x>
- \* He, X., Wang, Y., & Lun, B. (2020). 高管团队性别多元化对创新型企业绩效影响机制研究—基于技术密集度的视角 [Gender diversity in the executive team is essential for innovation: Research on the influencing mechanism of enterprise performance—A technology-intensive perspective]. *Scientific Management Research*, 38(1), 113–118. 10.1004–115X(2020)01–0113–06
- Hedger, N., Gray, K. L., Garner, M., & Adams, W. J. (2016). Are visual threats prioritized without awareness? A critical review and meta-analysis involving 3 behavioral paradigms and 2696 observers. *Psychological Bulletin*, 142(9), 934.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83. <https://doi.org/10.1017/S0140525X0999152X>
- \* Henry, L. A., Buyl, T., & Jansen, R. J. G. (2018). Leading corporate sustainability: The role of top management team composition for triple bottom line performance. *Business Strategy and the Environment*, 28(1), 173–184. <https://doi.org/10.1002/bse.2247>
- \* Henttonen, K., Janhonen, M., Johanson, J.-E., & Puumalainen, K. (2010). The demographic antecedents and performance consequences of the social-network structure in work teams. *Team Performance Management: An International Journal*, 16(7/8), 388–412. <https://doi.org/10.1108/13527591011090655>
- \* Herbert, K. J. (2016). *Harnessing the innovative potential of culturally diverse global virtual teams through shared leadership* [PhD thesis]. Monash University.
- \* Héroux, S., & Fortin, A. (2016). Innovation: The influence of diversity and its competence of boards of directors and executive management. *International Journal of Organizational Innovation (Online)*, 8(3), 18.
- \* Héroux, S., & Fortin, A. (2022). Board of directors' attributes and aspects of cybersecurity disclosure. *Journal of Management and Governance*. <https://doi.org/10.1007/s10997-022-09660-7>
- \* Herron, M. T. (1993). *The effects of the ethnic and gender diversity of work teams on the perceptions of performance outputs* [PhD thesis]. California School of Professional Psychology-Los Angeles.
- \* Higgs, M., Plewnia, U., & Ploch, J. (2005). Influence of team composition and task complexity on team performance. *Team Performance Management: An International Journal*, 11(7/8), 227–250. <https://doi.org/10.1108/13527590510635134>
- \* Hinnant, C. C., Stvilia, B., Wu, S., Worrall, A., Burnett, G., Burnett, K., Kazmer, M. M., & Marty, P. F. (2012). Author-team diversity and the impact of scientific publications: Evidence from physics research at a national science lab. *Library & Information Science Research*, 34(4), 249–257. <https://doi.org/10.1016/j.lisr.2012.03.001>
- \* Hirai Y., Watanabe S., & Inuzuka A. (2012). 日本の大学発ベンチャーのトップ・マネジメント・チームが業績に与える影響に関する実証研究 [Empirical study on the impact of top management teams of university-founded ventures in Japan on performance]. *Research Technology Plan*, 27(3–4), 259–272. [https://doi.org/10.20801/jsrpim.27.3\\_4\\_259](https://doi.org/10.20801/jsrpim.27.3_4_259)
- \* Hirschfeld, R. R., Jordan, M. H., Feild, H. S., Giles, W. F., & Armenakis, A. A. (2005). Teams female representation and perceived potency as inputs to team outcomes in a predominantly male field setting. *Personnel Psychology*, 58(4), 893–924. <https://doi.org/10.1111/j.1744-6570.2005.00892.x>
- \* Hoch, J. E. (2014). Shared leadership, diversity, and information sharing in teams. *Journal of Managerial Psychology*, 29(5), 541–564.
- \* Hoch, J. E., Pearce, C. L., & Welzel, L. (2010). Is the most effective team leadership shared? *Journal of Personnel Psychology*, 9(3), 105–116. <https://doi.org/10.1027/1866-5888/a000020>
- \* Hofhuis, J., Mensen, M., ten Den, L. M., van den Berg, A. M., Kooymann-Draijer, M., van Tilburg, M. C., Smits, C. H. M., & de Vries, S. (2018). Does functional diversity increase effectiveness of community care teams? The moderating role of shared vision, interaction frequency, and team reflexivity. *Journal of Applied Social Psychology*, 48(10), 535–548. <https://doi.org/10.1111/jasp.12533>
- Hofstede, G. (2015). *The dimension scores in the Hofstede model of national culture can be downloaded here*. Geert Hofstede. <https://geerthofstede.com/research-and-vsm/dimension-data-matrix/>. Accessed 15 Jan 2024.
- \* Hoisl, K., Gruber, M., & Conti, A. (2016). R&D team diversity and performance in hypercompetitive environments. *Strategic Management Journal*, 38(7), 1455–1477. <https://doi.org/10.1002/smj.2577>
- Hollenbeck, J. R., Beersma, B., & Schouten, M. E. (2012). Beyond team types and taxonomies: A dimensional scaling conceptualization for team description. *Academy of Management Review*, 37(1), 82–106. <https://doi.org/10.5465/amr.2010.0181>
- \* Homan, A. C., Buengeler, C., Eckhoff, R. A., van Ginkel, W. P., & Voelpel, S. C. (2015). The interplay of diversity training and diversity beliefs on team creativity in nationality diverse teams. *Journal of Applied Psychology*, 100(5), 1456–1467. <https://doi.org/10.1037/apl0000013>
- \* Homan, A. C., & Greer, L. L. (2013). Considering diversity: The positive effects of considerate leadership in diverse teams. *Group Processes & Intergroup Relations*, 16(1), 105–125. <https://doi.org/10.1177/1368430212437798>
- Hong, L., & Page, S. E. (2004). Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proceedings of the National Academy of Sciences*, 101(46), 16385–16389. <https://doi.org/10.1073/pnas.0403723101>
- \* Hoogendoorn, S., Oosterbeek, H., & van Praag, M. (2013). The impact of gender diversity on the performance of business teams: Evidence from a field experiment. *Management Science*, 59(7), 1514–1528. <https://doi.org/10.1287/mnsc.1120.1674>
- \* Hoogendoorn, S., Parker, S. C., & van Praag, M. (2017). Smart or diverse start-up teams? Evidence from a field experiment. *Organization Science*, 28(6), 1010–1028. <https://doi.org/10.1287/orsc.2017.1158>
- \* Hoogendoorn, S. & van Praag, M. (2012). *Ethnic diversity and team performance: A field experiment*. Tinbergen Institute Discussion Paper 12–068/3. <https://doi.org/10.2139/ssrn.2105284>
- Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management*, 33(6), 987–1015. <https://doi.org/10.1177/0149206307308587>
- \* Dang, R., Houanti, L. & Teulon, F. (2016). Diversité culturelle nationale et performance d'équipe : le cas de la NBA. [National cultural diversity and team performance: The case of the NBA]. *Management & Sciences Sociales*, 20, 81–97. <https://doi.org/10.3917/mss.020.0081>
- \* Houlette, M. A. (2003). *Maximizing the benefits of diversity: Effects of group boundaries, time pressure, and task type on bias and group decision effectiveness* [PhD thesis]. University of Delaware.
- J\* Hsiao, J.-F. (2011). 高阶管理团队之特征对组织绩效与管理者薪资之影响-以饭店业为例 [Effects of TMT characteristics on organizational performance and managerial compensation: An empirical study of the hotel industry] [Master's thesis]. National Dong Hwa University, Taiwan.
- \* Hsieh, C.-L. (2018). 高阶管理团队之多样性对组织绩效的影响 [Top management team diversity and firm performance] [Master's thesis]. National Chang Kung University.

- \* Hsu, B. (2014). 銀行業高階經營團隊特性對績效影響之探索 [A study of the relationship between top management team characteristics and performance for Taiwan's bank industry] [Master's thesis]. National Chung Hsing University.
- \* Hsu, K. (2008). 團隊人力資本、團隊學習型態異質性對團隊創新能力之影響:團隊互動型態、領導部屬交換關係之變異、以及團隊社會資本為干擾變項 [The impact of team human capital and heterogeneity in team learning styles on team innovation: Team interaction patterns, variation in leader-member exchange relationships, and team social capital as moderators] [PhD thesis]. National Changhua University of Education.
- \* Hu, J. (2014). 基于高管团队异质性的R&D投入对企业绩效影响研究 [Research on the impact of R&D investment on corporate performance based on the heterogeneity of the top management team] [Master's thesis]. Hunan University.
- \* Huang, D., & Zhu, X. (2016). 高管团队任职背景与企业经营绩效的影响研究——基于民营企业上市公司经验数据 [Research on the influence of executive team's appointment background on corporate operating performance—Based on empirical data from listed private enterprises]. *Economic System Reform*, 1, 131–138.
- \* Huang, T. (2019). 高管团队异质性、CEO权力和企业绩效 [Top management team heterogeneity, CEO power, and corporate performance] [Master's thesis]. South China University of Technology.
- \* Huang, X. (2017). 高新技术企业高管团队特征对企业绩效的影响研究 [Study on the impact of high-tech enterprise top management team characteristics on corporate performance] [Master's thesis]. Zhejiang Gongshang University.
- \* Huang, X. (2019). 高管团队异质性对企业绩效的影响 [The impact of top management team diversity on corporate performance] [Master's thesis]. Southwestern University of Finance and Economics.
- \* Huang, Y.-M. (2006). 關係相關多元化與工作相關多元化對團隊歷程與團隊績效之影響 [The effects of relation-oriented and job-related diversity on team processes and team performance] [PhD thesis]. National Sun Yat-sen University, China.
- \* Huckman, R. S., & Staats, B. R. (2011). Fluid tasks and fluid teams: The impact of diversity in experience and team familiarity on team performance. *Manufacturing & Service Operations Management*, 13(3), 310–328. <https://doi.org/10.1287/msom.1100.0321>
- Hülsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94(5), 1128–1145. <https://doi.org/10.1037/a0015978>
- \* Hüttermann, H. (2013). *Alters-Diversität, Konflikte und Innovation in Teams: Der Einfluss transformationaler Führung [The Influence of Age Diversity, Conflicts, and Innovation in Teams: The Impact of Transformational Leadership]* [PhD thesis]. University of Konstanz-Department of Political and Administrative Sciences.
- \* Ingersoll, K., Malesky, E., & Saiegh, S. M. (2017). Heterogeneity and team performance: Evaluating the effect of cultural diversity in the world's top soccer league. *Journal of Sports Analytics*, 3(2), 67–92. <https://doi.org/10.3233/jsa-170052>
- \* Inglês, T. M. B. (2009). *O papel da diversidade na eficácia do trabalho em equipa: A influência das variáveis moderadoras percepção de diversidade e identificação com a equipa nesta relação [The role of diversity in team effectiveness: The influence of moderating variables perception of diversity and team identification in this relationship]*. [Masters thesis] University Institute of Lisbon.
- Jackson, J. L., Kuriyama, A., Anton, A., Choi, A., Fournier, J.-P., Geier, A.-K., Jacqueroz, F., Kogan, D., Scholcoff, C., & Sun, R. (2019). The accuracy of Google Translate for abstracting data from non-english-language trials for systematic reviews. *Annals of Internal Medicine*, 171(9), 677–679. <https://doi.org/10.7326/M19-0891>
- \* Jackson, S. E., & Joshi, A. (2004). Diversity in social context: A multi-attribute, multilevel analysis of team diversity and sales performance. *Journal of Organizational Behavior*, 25(6), 675–702. <https://doi.org/10.1002/job.265>
- \* Jehn, K. A., & Bezrukova, K. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior*, 25(6), 703–729. <https://doi.org/10.1002/job.257>
- \* Jehn, K. A., Chadwick, C., & Thatcher, S. M. B. (1997). To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management*, 8(4), 287–305. <https://doi.org/10.1108/eb022799>
- \* Jehn, K. A., & Conlon, D. E. (2018). Are lifestyle differences beneficial? The effects of marital diversity on group outcomes. *Small Group Research*, 49(4), 429–451. <https://doi.org/10.1177/1046496418755920>
- \* Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict and performance in workgroups. *Administrative Science Quarterly*, 44(4), 741–763. <https://doi.org/10.2307/2667054>
- \* Jia, D. (2008). 论不同行业背景下高管团队异质性对企业绩效的影响 [On the impact of executive team heterogeneity on corporate performance in different industry backgrounds]. *Business Era*, 18, 43–44.
- \* Jia, X. (2016). 高层管理团队特征与企业绩效的关系研究 [The relationship between top management team characteristics and corporate performance] [Master's thesis]. Capital University of Economics and Business.
- \* Jiao, H., Wang, T., & Yang, J. (2022). Team structure and invention impact under high knowledge diversity: An empirical examination of computer workstation industry. *Technovation*, 114, 102449. <https://doi.org/10.1016/j.technovation.2021.102449>
- \* Jiaqi, H., & Daren, C. (2003). 团队多元化与知识分享、知识创造及创新绩效 [Team diversity and knowledge sharing, knowledge creation and innovation performance]. *NTU Management Series*, 13(2), 233–280.
- \* Jiayi, Z. (2012). 團隊多樣性對團隊績效之影響—以高承諾工作系統與交互記憶系統為調節變數 [Team diversities and team performance: Moderating by high-commitment work systems and transactive memory systems] [Master's thesis]. National Cheng Kung University.
- \* Jinlong, W., & Yefan, C. (2008). 高科技上市公司高管人力資本与公司绩效的实证研究 [An empirical study on the human capital and firm performance of executives of high-tech listed companies]. *China Science and Technology Forum*, 6, 116–120.
- Joecks, J., Pull, K., & Vetter, K. (2013). Gender diversity in the boardroom and firm performance: What exactly constitutes a “critical mass?” *Journal of Business Ethics*, 118(1), 61–72. <https://doi.org/10.1007/s10551-012-1553-6>
- \* Johan, A. P., & Wibowo, A. (2012). Diversitas Tim Manajemen Puncak, Kekomprehensifan Pengambilan Keputusan, Integrasi Sosial dan Kinerja Perusahaan: Studi pada Bank Perkreditan Rakyat [Diversity of top management teams, comprehensiveness of decision making, social integration, and company performance: A study on people's credit bank]. *Jurnal Siasat Bisnis*, 16(2), 155–166.
- \* Johnson, A., Nguyen, H., Groth, M., & White, L. (2018). Reaping the rewards of functional diversity in healthcare teams: Why team processes improve performance. *Group & Organization Management*, 43(3), 440–474. <https://doi.org/10.1177/1059601118769192>
- \* Jong-hyuk, Park, & Seok-gyun, K. (2009). 다기능프로젝트팀의 다양성, 조직맥락, 팀개발기간이팀효과성에미치는영향 [The effects of team diversity, organizational context, and team development on the effectiveness of cross-functional project teams]. *Journal of Management Research*, 38(5), 1,273-1,305.

- \* Joshi, A. A. (2002). *How does context matter? Examining the process and performance outcomes of work team heterogeneity* [PhD thesis]. Rutgers School of Graduate Studies.
- Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: A meta-analytic review. *The Academy of Management Journal*, 52(3), 599–627.
- \* Jukka, T. (2020). Top management team demography and firm operating performance: A path analysis. *Journal of Strategy and Management*, 14(1), 19–34. <https://doi.org/10.1108/jσμα-12-2019-0224>
- \* Jules, C. (2007). *Diversity of member composition and team learning in organizations* [PhD thesis]. Case Western Reserve University.
- \* Jung, M.-S., Lee, S.-H., & Kim, K.-J. (2010). 최고경영자팀이 의료기관의성과에 미치는 영향 [Top management team heterogeneity, interaction and organizational performance in Korean hospitals]. *Korean Journal of Health Policy and Administration*, 20(1), 137–154. <https://doi.org/10.4332/kjhpa.2010.20.1.137>
- \* Kaczmarek, S., & Ruijgrok, W. (2013). In at the deep end of firm internationalization. *Management International Review*, 53(4), 513–534. <https://doi.org/10.1007/s11575-012-0159-7>
- Kadam, R., Rao, S. A., Kareem Abdul, W., & Jabeen, S. S. (2020). Diversity climate perceptions and its impact on multicultural team innovation and performance. *Measuring Business Excellence*, 24(3), 301–318. <https://doi.org/10.1108/MBE-04-2019-0037>
- \* Kang, H.-R., Yang, H.-D., & Rowley, C. (2006). Factors in team effectiveness: Cognitive and demographic similarities of software development team members. *Human Relations*, 59(12), 1681–1710. <https://doi.org/10.1177/0018726706072891>
- \* Karriker, J. H., Madden, L. T., & Katell, L. A. (2017). Team composition, distributed leadership, and performance: It's good to share. *Journal of Leadership & Organizational Studies*, 24(4), 507–518. <https://doi.org/10.1177/1548051817709006>
- \* Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. *The Journal of Applied Psychology*, 94, 77–89. <https://doi.org/10.1037/a0013077>
- \* Kearney, E., Gebert, D., & Voelpel, S. C. (2009). When and how diversity benefits teams: The importance of team members need for cognition. *Academy of Management Journal*, 52(3), 581–598. <https://doi.org/10.5465/amj.2009.41331431>
- \* Kearney, E., Razinskas, S., Weiss, M., & Hoegl, M. (2022). Gender diversity and team performance under time pressure: The role of team withdrawal and information elaboration. *Journal of Organizational Behavior*, 43(7), 1224–1239. <https://doi.org/10.1002/job.2630>
- \* Keck, S. L. (1997). Top management team structure: Differential effects by environmental context. *Organization Science*, 8(2), 143–156. <https://doi.org/10.1287/orsc.8.2.143>
- \* Keinan, G., & Koren, M. (2002). Teaming up type as and bs: The effects of group composition on performance and satisfaction. *Applied Psychology*, 51(3), 425–445. <https://doi.org/10.1111/1464-0597.00101>
- \* Kelemen, T. K., Matthews, S. H., Zhang, X., Bradley, B. H., & Liu, H. (2020). When does gender diversity enhance team performance? The dual need for visionary leadership and team tenure. *Journal of Applied Social Psychology*, 50(9), 501–511. <https://doi.org/10.1111/jasp.12690>
- \* Keller, R. T. (2001). Cross-functional project groups in research and new product development: Diversity, communications, job stress, and outcomes. *Academy of Management Journal*, 44(3), 547–555. <https://doi.org/10.5465/3069369>
- Keller, S., & Meaney, M. (2017). High-performing teams: A timeless leadership topic | McKinsey. *McKinsey Quarterly*, June. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/high-performing-teams-a-timeless-leadership-topic>. Accessed 20 December 2022.
- Kepes, S., Keener, S. K., McDaniel, M. A., & Hartman, N. S. (2022). Questionable research practices among researchers in the most research-productive management programs. *Journal of Organizational Behavior*, 43(7), 1190–1208. <https://doi.org/10.1002/job.2623>
- \* Kier, A. S., & McMullen, J. S. (2020). Entrepreneurial imaginativeness and new venture ideation in newly forming teams. *Journal of Business Venturing*, 35(6), 106048. <https://doi.org/10.1016/j.jbusvent.2020.106048>
- \* Kilduff, M., Angelmar, R., & Mehra, A. (2000). Top management-team diversity and firm performance: Examining the role of cognitions. *Organization Science*, 11(1), 21–34. <https://doi.org/10.1287/orsc.11.1.21.12569>
- \* Kim, J. (2021). Female representation in TMTs and the use of innovation-oriented intangible assets. *Academy of Management Proceedings*, 2021(1), 13579. <https://doi.org/10.5465/ambpp.2021.13579abstract>
- \* Kim, J., & Song, C. (2020). The relationship between R&D team diversity and team creativity. *Management Decision*, 59(2), 175–189. <https://doi.org/10.1108/md-12-2019-1727>
- \* Kim, S., Seo, K., Kang, S., & Cho, S. (2013). Organizational tenure diversity as predictors of combat performance in ROK army. *Military Psychology*, 25(4), 345–353. <https://doi.org/10.1037/mil0000004>
- \* Kim, T.-Y., David, E. M., & Liu, Z. (2020). Perceived cognitive diversity and creativity: A multilevel study of motivational mechanisms and boundary conditions. *The Journal of Creative Behavior*, 55(1), 168–182. <https://doi.org/10.1002/jocb.443>
- \* Kirkman, B. L., Cordery, J. L., Mathieu, J., Rosen, B., & Kukenberger, M. (2013). Global organizational communities of practice: The effects of nationality diversity, psychological safety, and media richness on community performance. *Human Relations*, 66(3), 333–362. <https://doi.org/10.1177/0018726712464076>
- \* Kirkman, B. L., Tesluk, P. E., & Rosen, B. (2004). The impact of demographic heterogeneity and team leader-team member demographic fit on team empowerment and effectiveness. *Group & Organization Management*, 29(3), 334–368. <https://doi.org/10.1177/1059601103257412>
- \* Kirkman, B., & Shapiro, D. (2005). The impact of cultural value diversity on multicultural team Performance☆. In *Advances in international management* (pp. 33–67). Elsevier. [https://doi.org/10.1016/s0747-7929\(05\)18002-0](https://doi.org/10.1016/s0747-7929(05)18002-0)
- \* Klein, K. J., Knight, A. P., Ziegert, J. C., Lim, B. C., & Saltz, J. L. (2011). When team members' values differ: The moderating role of team leadership. *Organizational Behavior and Human Decision Processes*, 114(1), 25–36. <https://doi.org/10.1016/j.obhdp.2010.08.004>
- Kleingeld, A., van Mierlo, H., & Arends, L. (2011). The effect of goal setting on group performance: A meta-analysis. *Journal of Applied Psychology*, 96(6), 1289–1304. <https://doi.org/10.1037/a0024315>
- \* Ko, E.-J., Wiklund, J., & Pollack, J. M. (2020). Entrepreneurial team diversity and productivity: The role of family relationships in nascent ventures. *Entrepreneurship Theory and Practice*, 45(2), 386–417. <https://doi.org/10.1177/1042258720902058>
- Köllen, T. (2021). Diversity management: A critical review and agenda for the future. *Journal of Management Inquiry*, 30(3), 259–272. <https://doi.org/10.1177/1056492619868025>
- \* Kouamé, S., Oliver, D., & Poisson-de-Haro, S. (2015). Can emotional differences be a strength? Affective diversity and managerial decision performance. *Management Decision*, 53(8), 1662–1676. <https://doi.org/10.1108/md-08-2014-0540>

- \* Krishnan, H. A., & Park, D. (2005). A few good women—On top management teams. *Journal of Business Research*, 58(12), 1712–1720. <https://doi.org/10.1016/j.jbusres.2004.09.003>
- \* Kuan, C.-C. (2008). 高階管理團隊異質性與績效：國際化及環境不確定性之干擾效果 [Top management team heterogeneity and performance: The moderating effects of internationalization and environmental uncertainty] [Master's thesis]. Ming Chuan University.
- \* Kuo, P.-H. (2013). 台灣電子產業自有品牌廠商高階管理團隊異質性與廠商績效關係之研究：市場導向程度之干擾效果 [The linkage of top management team heterogeneity and firm performance in Taiwan electronic industry brand firms: The moderating effect of market orientation] [Master's thesis]. National Dong Hwa University.
- \* Kurtzberg, T. R. (2005). Feeling creative, being creative: An empirical study of diversity and creativity in teams. *Creativity Research Journal*, 17(1), 51–65. [https://doi.org/10.1207/s15326934crj1701\\_5](https://doi.org/10.1207/s15326934crj1701_5)
- \* Kwon, Y., & Lee, J. (2020). Demographic faultlines in groups: The curvilinearly moderating effects of task interdependence. *The Journal of Asian Finance, Economics and Business*, 7(3), 311–322. <https://doi.org/10.13106/jafeb.2020.vol7.no3.311>
- Lakens, D., Hilgard, J., & Staaks, J. (2016). On the reproducibility of meta-analyses: Six practical recommendations. *BMC Psychology*, 4(1), 24. <https://doi.org/10.1186/s40359-016-0126-3>
- Lakens, D., Scheel, A. M., & Isager, P. M. (2018). Equivalence testing for psychological research: A tutorial. *Advances in Methods and Practices in Psychological Science*, 1(2), 259–269. <https://doi.org/10.1177/2515245918770963>
- \* Laurant, J., & Villesèche, F. (2017). The performance of gender diverse teams: What is the relation between diversity attitudes and degree of diversity? *European Management Review*, 16(2), 243–254. <https://doi.org/10.1111/emre.12164>
- \* Lee, C., & Chen, W.-J. (2007). Cross-functionality and charged behavior of the new product development teams in Taiwan's information technology industries. *Technovation*, 27(10), 605–615. <https://doi.org/10.1016/j.technovation.2007.02.012>
- \* Lee, D.-R., & Kim, T.-Y. (2015). 기능적 다양성이 팀창의성에 미치는 영향: 팀 내재적 동기부여의 매개효과와 과업 상호의존의 조절효과를 중심으로 [A study on the effects of functional diversity on team creativity: The mediating role of team intrinsic motivation and the moderating role of task interdependence]. *Journal of Management Research*, 44(5), 1,211–1,239. <https://doi.org/10.17287/kmr.2015.44.5.1211>
- \* Lee, E. K. (Elise), Chung, W., & Hong, W. (2022). Task conflict and team performance: Roles of expertise disparity and functional background diversity. *International Journal of Conflict Management*, 33(4), 668–683. <https://doi.org/10.1108/ijcma-08-2021-0130>
- \* Lee, H. W., Choi, J. N., & Kim, S. (2018). Does gender diversity help teams constructively manage status conflict? An evolutionary perspective of status conflict, team psychological safety, and team creativity. *Organizational Behavior and Human Decision Processes*, 144, 187–199. <https://doi.org/10.1016/j.obhdp.2017.09.005>
- \* Lee, H. W., & Kim, J. (2019). When employee gender diversity benefits firm performance: The importance of TMT gender diversity. *Academy of Management Proceedings*, 2019(1), 13900. <https://doi.org/10.5465/ambpp.2019.13900abstract>
- \* Lee, J. Y., Choi, B. C., Ghauri, P. N., & Park, B. I. (2021). Knowledge centralization and international R&D team performance: Unpacking the moderating roles of team-specific characteristics. *Journal of Business Research*, 128, 627–640. <https://doi.org/10.1016/j.jbusres.2020.06.052>
- \* Lee, J. Y., Swink, M., & Pandejpong, T. (2016). Team diversity and manufacturing process innovation performance: The moderating role of technology maturity. *International Journal of Production Research*, 55(17), 4912–4930. <https://doi.org/10.1080/00207543.2016.1272765>
- \* Lee, K., & Chae, Y. J. (2017). LMX differentiation, diversity, and group performance. *Career Development International*, 22(2), 106–123. <https://doi.org/10.1108/cdi-11-2015-0154>
- \* Lee, T., Liu, W.-T., & Yu, J.-X. (2020). Does TMT composition matter to environmental policy and firm performance? The role of organizational slack. *Corporate Social Responsibility and Environmental Management*, 28(1), 196–213. <https://doi.org/10.1002/csr.2042>
- \* Lee, Y.-C. (2011). 團隊多元化對創新的影響效果：凝聚力的團隊層次與跨層次之中介效果 [The influence of team diversity on innovation: An examination of the mediating effects of cohesiveness in team level and cross level] [PhD thesis]. Unpublished Doctoral Thesis, China.
- \* Lee, Y.-N., Walsh, J. P., & Wang, J. (2015). Creativity in scientific teams: Unpacking novelty and impact. *Research Policy*, 44(3), 684–697. <https://doi.org/10.1016/j.respol.2014.10.007>
- \* Lei, H., & Nie, S. (2015). 权变视角下联盟组合配置策略对绩效的影响 [The impact of alliance combination configuration strategy on performance from a contingency perspective]. *Systems Engineering*, 33(9), 1–8.
- Leif, N., & Simonsohn, U. (2014). [27] Thirty-somethings are shrinking and other U-shaped challenges. Data Colada Blog. <http://datacolada.org/27>. Accessed 31 Mar 2024.
- \* Leslie, L. M. (2016). A status-based multilevel model of ethnic diversity and work unit performance. *Journal of Management*, 43(2), 426–454. <https://doi.org/10.1177/0149206314535436>
- \* L'Heureux, R. A. (1994). *The effect of internationalization on the relationship between TMT characteristics and firm performance* [PhD thesis]. The Florida State University.
- \* Li, C., Lin, C., Tien, Y., & Chen, C. (2015). A multilevel model of team cultural diversity and creativity: The role of climate for inclusion. *The Journal of Creative Behavior*, 51(2), 163–179. <https://doi.org/10.1002/jocb.93>
- \* Li, C.-R. (2016). The role of top-team diversity and perspective taking in mastering organizational ambidexterity. *Management and Organization Review*, 12(4), 769–794. <https://doi.org/10.1017/mor.2015.54>
- \* Li, H., & Wang, M. (2021). Collaborative innovation networks and innovation performance of new ventures: The contingent roles of gender diversity and education diversity. *Innovation*, 25(2), 129–152. <https://doi.org/10.1080/14479338.2021.1989308>
- \* Li, J., & Hambrick, D. C. (2005). Factional groups: A new vantage on demographic faultlines, conflict, and disintegration in work teams. *Academy of Management Journal*, 48(5), 794–813. <https://doi.org/10.5465/amj.2005.18803923>
- \* Li, J., Shemla, M., & Wegge, J. (2021). The preventative benefit of group diversification on group performance decline: An investigation with latent growth models. *Journal of Organizational Behavior*, 42(3), 332–348. <https://doi.org/10.1002/job.2498>
- \* Li, J., Zhao, M., Xia, G., & Liu, C. (2018). The relationship between team hometown diversity and team creativity: From the Chinese perspective. *Sustainability*, 10(10), 3458. <https://doi.org/10.3390/su10103458>
- \* Li, M., & Jones, C. D. (2018). The effects of TMT faultlines and CEO-TMT power disparity on competitive behavior and firm performance. *Group & Organization Management*, 44(5), 874–914. <https://doi.org/10.1177/1059601118813790>
- \* Li, N. (2012). *Is everyone created equal? A social network perspective on personality in teams* [PhD thesis]. Texas A&M University.
- \* Li, P.-Y. (2016). The impact of the top management teams' knowledge and experience on strategic decisions and performance. *Journal of Management & Organization*, 23(4), 504–523. <https://doi.org/10.1017/jmo.2016.24>



- \* Li, P.-Y., & Huang, K.-F. (2019). The antecedents of innovation performance: The moderating role of top management team diversity. *Baltic Journal of Management*, 14(2), 291–311. <https://doi.org/10.1108/bjm-07-2017-0202>
- \* Li, Q., She, Z., & Yang, B. (2018). Promoting innovative performance in multidisciplinary teams: The roles of paradoxical leadership and team perspective taking. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.01083>
- Li, X., Dusseldorp, E., & Meulman, J. J. (2017). Meta-CART: A tool to identify interactions between moderators in meta-analysis. *British Journal of Mathematical and Statistical Psychology*, 70(1), 118–136. <https://doi.org/10.1111/bmsp.12088>
- Li, X., Dusseldorp, E., Su, X., & Meulman, J. J. (2020). Multiple moderator meta-analysis using the R-package Meta-CART. *Behavior Research Methods*, 52(6), 2657–2673. <https://doi.org/10.3758/s13428-020-01360-0>
- \* Li, Y., Hsu, J. S.-C., Sun, H., & Parolia, N. (2022). Team leadership and diversity management in information systems development project teams. *Pacific Asia Journal of the Association for Information Systems*, 14, 1–29. <https://doi.org/10.17705/1pais.14501>
- \* Liang, H.-M., Kao, R.-H., Yang, C.-C., & Chien, P.-Y. (2014). Relationship between team diversity and innovation: The moderating effect of team leaders' innovative characteristics. *Proceedings of PICMET'14 Conference: Portland International Center for Management of Engineering and Technology; Infrastructure and Service Integration*, 973–980. <https://www.picmet.org/db/member/proceedings/2014/data/papers/14R0357.pdf>
- \* Liang, T.-P., Jiang, J., Klein, G. S., & Liu, J. Y.-C. (2010). Software quality as influenced by informational diversity, task conflict, and learning in project teams. *IEEE Transactions on Engineering Management*, 57(3), 477–487. <https://doi.org/10.1109/tem.2009.2033049>
- \* Liang, T.-P., Liu, C.-C., Lin, T.-M., & Lin, B. (2007). Effect of team diversity on software project performance. *Industrial Management & Data Systems*, 107(5), 636–653. <https://doi.org/10.1108/02635570710750408>
- Liao, Z., & Long, S. (2016). Cognitive diversity, alertness, and team performance. *Social Behavior & Personality: An International Journal*, 44(2), 209–220. <https://doi.org/10.2224/sbp.2016.44.2.209>
- \* Lim, B. C. (2003). *Do the leader and members make the team? The role of personality and cognitive ability* [PhD thesis]. University of Maryland, College Park.
- \* Lin, C.-J., & Li, C.-R. (2020). Differential effects of team level expertise diversity and individual level expertise dissimilarity on creativity: The moderating role of member social skills and leader social behavior. *Current Psychology*, 41(5), 2927–2937. <https://doi.org/10.1007/s12144-020-00813-1>
- \* Lin, C.-S., & Dang, V. T. (2016). Untangling the relationship between strategic consistency and organizational performance: An empirical analysis of moderator variables. *Journal of Management & Organization*, 23(4), 483–503. <https://doi.org/10.1017/jmo.2016.50>
- \* Lin, H. (2019). 高管团队异质性、高管激励与公司绩效的关系研究 [The relationship between top management team diversity, executive incentives, and company performance] [Master's thesis]. South China University of Technology.
- \* Lin, S.-Y. (2018). 創業團隊多元性與創新績效-功能性角色、認知形態與創業熱情之研究 [What makes an innovative entrepreneurial team? An examination of functional roles, cognitive styles and entrepreneurial passion diversity] [PhD thesis]. Unpublished doctoral thesis, National Sun Yat-sen University, China.
- \* Lin, X.-Q., & Jiang, R. (2011). 高层管理团队特征与企业财务绩效关系的实证研究——以我国房地产上市公司为例 [Empirical study on the relationship between senior management team characteristics and corporate financial performance—A case study of Chinese real estate listed companies]. *Journal of Zhejiang University: Humanities and Social Sciences*, 41(3), 190–197.
- \* Lin, Y.-C. (2012). 高階管理團隊特質對多國公司決策選擇及績效之影響 [The effect of top management team characteristics on multinational enterprise's strategic choice and performance] [Master's thesis]. National Chung Cheng University.
- \* Ling, X. (2015). 高管团队特征、研发支出与公司绩效 [Top management team characteristics, R&D expenditure, and company performance] [Master's thesis]. Soochow University.
- \* Lingling, S. (2006). 團隊多元化對團隊內衝突與後續行為的影響：以認知風格和價值觀一致性為調節變項的研究 [Effects of team diversity on intra-group conflict and team effectiveness: The moderating roles of cognitive style consistency and value congruence] [PhD thesis]. National Dong Hwa University.
- \* Liu, B., Liu, J., & Li, Y. (2015). 高管团队异质性与企业绩效的关系——管理自主权的调节作用 [The relationship between executive team heterogeneity and corporate performance—The moderating role of management autonomy]. *Research on Science and Technology Management*, 35(11), 147–153.
- \* Liu, N. (2010). 基于多元化战略的TMT特征对企业绩效的影响研究 [A study on the impact of TMT characteristics on corporate performance based on diversification strategy] [Master's thesis]. Huazhong University of Science and Technology.
- \* Liu, Q. (2020). 高层管理团队异质性、战略变革与企业绩效 [Top management team diversity, strategic change, and corporate performance] [Master's thesis]. Dalian University of Technology.
- \* Liu, T. (2015). R&D投入对企业绩效影响的实证分析 [Empirical analysis of the impact of R&D investment on corporate performance] [Master's thesis]. Nanjing University.
- \* Liu, W.-H., & Cross, J. A. (2016). A comprehensive model of project team technical performance. *International Journal of Project Management*, 34(7), 1150–1166. <https://doi.org/10.1016/j.ijproman.2016.05.011>
- \* Liu, X., Chen, M., Li, J., & Ma, L. (2019). How to manage diversity and enhance team performance: Evidence from online doctor teams in China. *International Journal of Environmental Research and Public Health*, 17(1), 48. <https://doi.org/10.3390/ijerph17010048>
- \* Liu, Y., Keller, R. T., & Bartlett, K. R. (2021). Initiative climate, psychological safety and knowledge sharing as predictors of team creativity: A multilevel study of research and development project teams. *Creativity and Innovation Management*, 30(3), 498–510. <https://doi.org/10.1111/caim.12438>
- \* Liu, Z., & Chen, J. (2017). 碳排放视角下生态创新、高管团队异质性与经济绩效的关系研究——以中国火力发电行业上市公司为例 [Research on the relationship between ecological innovation, executive team heterogeneity, and economic performance from the perspective of carbon emissions—A case study of China's thermal power industry listed companies]. *Soft Science*, 31(6), 86–90.
- \* Lix, K., Goldberg, A., Srivastava, S. B., & Valentine, M. A. (2022). Aligning differences: Discursive diversity and team performance. *Management Science*, 68(11), 8430–8448. <https://doi.org/10.1287/mnsc.2021.4274>
- \* Lizares, R. M. (2018). Top management team composition and firm performance. *Philippine Management Review*, 25, 71–98.
- \* Lo, F.-Y., Wang, Y., & Zhan, W. (2019). Does TMT cultural diversity contribute to firm performance and do socialisation and tenure matter? A test of two competing perspectives. *Personnel Review*, 49(1), 324–348. <https://doi.org/10.1108/pr-11-2018-0468>
- \* Lourenço, P. R., Dimas, I. D., & Rebelo, T. (2014). Effective workgroups: The role of diversity and culture. *Revista de Psicología Del Trabajo y de Las Organizaciones*, 30(3), 123–132. <https://doi.org/10.1016/j.rpto.2014.11.002>
- Lovakov, A., & Agadullina, E. R. (2021). Empirically derived guidelines for effect size interpretation in social psychology. *European*

- Journal of Social Psychology*, 51(3), 485–504. <https://doi.org/10.1002/ejsp.2752>
- \* Lu, C., Liu, Z., Xu, Y., Liao, S., & Fu, L. (2021). How TMT diversity influences open innovation: An empirical study on biopharmaceutical firms in China. *Technology Analysis & Strategic Management*, 34(2), 151–165. <https://doi.org/10.1080/09537325.2021.1892056>
- \* Lu, J. G., Swaab, R. I., & Galinsky, A. D. (2022). Global leaders for global teams: Leaders with multicultural experiences communicate and lead more effectively, especially in multinational teams. *Organization Science*, 33(4), 1554–1573. <https://doi.org/10.1287/orsc.2021.1480>
- \* Lu, W., & Peng, G. (2010, August). An empirical research on the relationship between top management teams' tenure and firm performance: Evidence from Chinese listed real estate companies. *2010 International Conference on Management and Service Science*. <https://doi.org/10.1109/icmss.2010.5577205>
- \* Lü, J., & Zhang, G. (2015). 知识异质性和知识型团队创造力的影响机制:基于互动认知的视角 [The mechanisms of knowledge heterogeneity on creativity of knowledge teams: An interactive cognition perspective]. *Acta Psychologica Sinica*, 47(4), 533. <https://doi.org/10.3724/sp.j.1041.2015.00533>
- \* Luan, K., Ling, C.-D., & Xie, X.-Y. (2015). The nonlinear effects of educational diversity on team creativity. *Asia Pacific Journal of Human Resources*, 54(4), 465–480. <https://doi.org/10.1111/1744-7941.12078>
- \* Luanglath, N., Ali, M., & Mohannak, K. (2019). Top management team gender diversity and productivity: The role of board gender diversity. *Equality, Diversity and Inclusion: An International Journal*, 38(1), 71–86. <https://doi.org/10.1108/edi-04-2018-0067>
- \* Luksyte, A., Avery, D. R., Parker, S. K., Wang, Y. (Lena), Johnson, L. U., & Crepeau, L. (2021). Age diversity in teams: Examining the impact of the least agreeable member. *Journal of Organizational Behavior*, 43(3), 546–565. <https://doi.org/10.1002/job.2570>
- \* Lungeanu, A., Whalen, R., Wu, Y. J., DeChurch, L. A., & Contractor, N. S. (2022). Diversity, networks, and innovation: A text analytic approach to measuring expertise diversity. *Network Science*, 11(1), 36–64. <https://doi.org/10.1017/nws.2022.34>
- \* Lyngsie, J., & Foss, N. J. (2016). The more, the merrier? Women in top-management teams and entrepreneurship in established firms. *Strategic Management Journal*, 38(3), 487–505. <https://doi.org/10.1002/smj.2510>
- \* Ma, C., Ge, Y., & Wang, J. (2021). Top management team intrapersonal functional diversity and adaptive firm performance: The moderating roles of the CEO–TMT power gap and severity of threat. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.772739>
- Ma, C., Ge, Y., & Zhao, H. (2022). 高管团队多元化与组织绩效的关系:来自元分析的证据 [The relationship between top management team diversity and firm performance: Evidence from a meta-analysis]. *Human Resources Development of China*, 12. <https://doi.org/10.16471/j.cnki.11-2822/c.2022.12.003>
- \* Ma, C., Ge, Y., & Zhao, H. (2024). Top management team diversity and adaptive firm performance: The moderating roles of overlapping team tenure and severity of threat. *Journal of Organizational Change Management*, 37(1), 1–23. <https://doi.org/10.1108/JOCM-11-2022-0321>
- \* Ma, F., & Guo, X. (2010). 高管团队异质性与技术创新绩效的关系研究——以高管团队行为整合为调节变量 [A study on the correlation between heterogeneity of TMT and technological innovation Performance—The moderating role of behavioral integration of TMT]. *Science of Science and Management of S. & T.*, 31(12), 186–191.
- \* MacCurtain, S., Flood, P. C., Ramamoorthy, N., West, M. A., & Dawson, J. F. (2010). The top management team, reflexivity, knowledge sharing and new product performance: A study of the Irish software industry. *Creativity and Innovation Management*, 19(3), 219–232. <https://doi.org/10.1111/j.1467-8691.2010.00564.x>
- \* Maddi, A., & Gingras, Y. (2021). Gender diversity in research teams and citation impact in economics and management. *Journal of Economic Surveys*, 35(5), 1381–1404. <https://doi.org/10.1111/joes.12420>
- \* Maderer, D., Holtbrügge, D., & Schuster, T. (2014). Professional football squads as multicultural teams. *International Journal of Cross Cultural Management*, 14(2), 215–238. <https://doi.org/10.1177/1470595813510710>
- \* Malhotra, M. K., Ahire, S., & Shang, G. (2016). Mitigating the impact of functional dominance in cross-functional process improvement teams. *Decision Sciences*, 48(1), 39–70. <https://doi.org/10.1111/decj.12217>
- \* Manata, B. (2019). Investigating the impact of racial diversity in decision-making groups: The moderating role of relationship conflict. *Negotiation and Conflict Management Research*. <https://doi.org/10.1111/ncmr.12173>
- Martín-Martín, A., Thelwall, M., Orduna-Malea, E., & Delgado López-Cózar, E. (2021). Google Scholar, Microsoft Academic, Scopus, Dimensions, Web of Science, and OpenCitations' COCI: A multidisciplinary comparison of coverage via citations. *Scientometrics*, 126(1), 871–906. <https://doi.org/10.1007/s11192-020-03690-4>
- \* Martins, L. L., Schilpzand, M. C., Kirkman, B. L., Ivanaj, S., & Ivanaj, V. (2013). A contingency view of the effects of cognitive diversity on team performance: The moderating roles of team psychological safety and relationship conflict. *Small Group Research*, 44(2), 96–126. <https://doi.org/10.1177/1046496412466921>
- \* Mason, A. (2019). *Is there a correlation between the level of group diversity and the level of creativity in the group?* [PhD thesis]. Harvard University.
- \* Mayo, M. (1998). *Work team diversity: An examination of a process model using artificial intelligence and social network methods* [PhD thesis]. State University of New York at Buffalo.
- \* Mazra, M. (2017). Entrepreneurial team diversity and new venture performance in Cameroon: The moderating effect of conflicts. *International Journal of Innovation Management*, 21(04), 1750038. <https://doi.org/10.1142/s1363919617500384>
- \* McGurk, D. (2002). *The effects of diversity on intragroup conflict and performance in the US Army Reserve Officer [s] Training Corps (ROTC)* [PhD thesis]. Texas Tech University.
- McKeown, S., & Mir, Z. M. (2021). Considerations for conducting systematic reviews: Evaluating the performance of different methods for de-duplicating references. *Systematic Reviews*, 10(1), 38. <https://doi.org/10.1186/s13643-021-01583-y>
- \* McNicol, J. P. (2010). *A three essay dissertation on: Do strategic committees matter?* [PhD thesis]. The University of Texas at El Paso.
- \* Meiseberg, B., & Ehrmann, T. (2012). Diversity in teams and the success of cultural products. *Journal of Cultural Economics*, 37(1), 61–86. <https://doi.org/10.1007/s10824-012-9173-7>
- \* Melero, E., & Palomeras, N. (2015). The Renaissance Man is not dead! The role of generalists in teams of inventors. *Research Policy*, 44(1), 154–167. <https://doi.org/10.1016/j.respol.2014.07.005>
- \* Mello, A. L., & Delise, L. A. (2015). Cognitive diversity to team outcomes. *Small Group Research*, 46(2), 204–226. <https://doi.org/10.1177/1046496415570916>
- \* Michie, S. G., Dooley, R. S., & Fryxell, G. E. (2002). Top management team heterogeneity, consensus, and collaboration: A moderated mediation model of decision quality. *Academy of Management Proceedings*, 2002(1), L1–L6. <https://doi.org/10.5465/apb.2002.7516524>
- \* Michinov, N., & Jeanson, S. (2021). Creativity in scientific research: Multidisciplinary fosters depth of ideas among scientists in

- electronic “Brainwriting” groups. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 65(7), 1542–1553. <https://doi.org/10.1177/00187208211048301>
- Miles, J., & Hollenbeck, J. R. (2013). Teams and technology. In M. D. Coovert & L. F. Thompson (Eds.), *The Psychology of Workplace Technology*. Routledge. <https://doi.org/10.4324/9780203735565>
- \* Miller III, C. C. (1990). *Cognitive diversity within management teams: Implications for strategic decision processes and organizational performance* [PhD thesis]. The University of Texas at Austin.
- \* Miller, M. C. (1994). *Relationships among cultural heterogeneity, group processes, and group outcomes: A model and empirical study* [PhD thesis]. University of Houston.
- \* Minichilli, A., Zattoni, A., & Zona, F. (2009). Making boards effective: An empirical examination of board task performance. *British Journal of Management*, 20(1), 55–74. <https://doi.org/10.1111/j.1467-8551.2008.00591.x>
- \* Mitchell, R., & Boyle, B. (2015). Professional diversity, identity salience and team innovation: The moderating role of open-mindedness norms. *Journal of Organizational Behavior*, 36(6), 873–894. <https://doi.org/10.1002/job.2009>
- \* Mitchell, R., Boyle, B., & Nicholas, S. (2020). The interactive influence of human and social capital on capability development: The role of managerial diversity and ties in adaptive capability. *Personnel Review*, 50(3), 865–879. <https://doi.org/10.1108/pr-08-2019-0410>
- \* Mitchell, R., Boyle, B., Nicholas, S., Maitland, E., & Zhao, S. (2016). Boundary conditions of a curvilinear relationship between decision comprehensiveness and performance: The role of functional and national diversity. *Journal of Business Research*, 69(8), 2801–2811. <https://doi.org/10.1016/j.jbusres.2015.12.049>
- \* Mitchell, R., Boyle, B., O’Brien, R., Malik, A., Tian, K., Parker, V., Giles, M., Joyce, P., & Chiang, V. (2017). Balancing cognitive diversity and mutual understanding in multidisciplinary teams. *Health Care Management Review*, 42(1), 42–52. <https://doi.org/10.1097/hmr.0000000000000088>
- \* Mitchell, R., Boyle, B., Parker, V., Giles, M., Chiang, V., & Joyce, P. (2015). Managing inclusiveness and diversity in teams: How leader inclusiveness affects performance through status and team identity. *Human Resource Management*, 54(2), 217–239. <https://doi.org/10.1002/hrm.21658>
- \* Mitchell, R., Boyle, B., & Snell, L. (2021). The curvilinear effect of professional faultlines on team innovation: The pivotal role of professional identity threat. *Applied Psychology*, 71(1), 296–311. <https://doi.org/10.1111/apps.12322>
- \* Mitchell, R., Boyle, B., & Stieglitz, S. V. (2018). Professional commitment and team effectiveness: A moderated mediation investigation of cognitive diversity and task conflict. *Journal of Business and Psychology*, 34(4), 471–483. <https://doi.org/10.1007/s10869-018-9550-0>
- \* Mitchell, R. J., Parker, V., & Giles, M. (2011). When do interprofessional teams succeed? Investigating the moderating roles of team and professional identity in interprofessional effectiveness. *Human Relations*, 64(10), 1321–1343. <https://doi.org/10.1177/0018726711416872>
- \* Mo, S., Ling, C.-D., & Xie, X.-Y. (2017). The curvilinear relationship between ethical leadership and team creativity: The moderating role of team faultlines. *Journal of Business Ethics*, 154(1), 229–242. <https://doi.org/10.1007/s10551-016-3430-1>
- \* Mohammed, S., Alipour, K. K., Martinez, P., Livert, D., & Fitzgerald, D. (2017). Conflict in the kitchen: Temporal diversity and temporal disagreements in chef teams. *Group Dynamics: Theory, Research, and Practice*, 21(1), 1–19. <https://doi.org/10.1037/gdn0000058>
- \* Mohammed, S., & Angell, L. C. (2004). Surface- and deep-level diversity in workgroups: Examining the moderating effects of team orientation and team process on relationship conflict. *Journal of Organizational Behavior*, 25(8), 1015–1039. <https://doi.org/10.1002/job.293>
- \* Mohammed, S., & Nadkarni, S. (2011). Temporal diversity and team performance: The moderating role of team temporal leadership. *Academy of Management Journal*, 54(3), 489–508. <https://doi.org/10.5465/amj.2011.61967991>
- \* Mohammed, S., & Nadkarni, S. (2014). Are we all on the same temporal page? The moderating effects of temporal team cognition on the polychronicity diversity–team performance relationship. *Journal of Applied Psychology*, 99(3), 404–422. <https://doi.org/10.1037/a0035640>
- Moon, K.-K., & Christensen, R. K. (2020). Realizing the performance benefits of workforce diversity in the U.S. Federal Government: The moderating role of diversity climate. *Public Personnel Management*, 49(1), 141–165. <https://doi.org/10.1177/0091026019848458>
- \* Moreno, Á. G., García, C. D., & Martínez, F. J. S. (2018). R&D team composition and product innovation: Gender diversity makes a difference. *European J. of International Management*, 12(4), 423. <https://doi.org/10.1504/ejim.2018.092843>
- \* Mortensen, M., & Hinds, P. J. (2001). Conflict and shared identity in geographically distributed teams. *International Journal of Conflict Management*, 12(3), 212–238. <https://doi.org/10.1108/eb022856>
- \* Moser, K. S., Dawson, J. F., & West, M. A. (2018). Antecedents of team innovation in health care teams. *Creativity and Innovation Management*, 28(1), 72–81. <https://doi.org/10.1111/caim.12285>
- \* Nakauchi M., & Iio H. (2008). 日本の製造業における社長交代とパフォーマンスの関係性–社長交代パターンとTMT構成の観点から [The relationship between CEO turnover and performance in Japanese manufacturing firms: From the perspectives of CEO turnover patterns and TMT composition]. *Journal of creative management*, 1, 19–36.
- \* Naranjo-Gil, D., Hartmann, F., & Maas, V. S. (2008). Top management team heterogeneity, strategic change and operational performance\*. *British Journal of Management*, 19(3), 222–234. <https://doi.org/10.1111/j.1467-8551.2007.00545.x>
- \* Narayan, S., Sidhu, J. S., & Volberda, H. W. (2020). From attention to action: The influence of cognitive and ideological diversity in top management teams on business model innovation. *Journal of Management Studies*, 58(8), 2082–2110. <https://doi.org/10.1111/joms.12668>
- \* Narayanan, S., & Terris, E. (2020). Inclusive manufacturing: The impact of disability diversity on productivity in a work integration social enterprise. *Manufacturing & Service Operations Management*, 22(6), 1112–1130. <https://doi.org/10.1287/msom.2020.0940>
- \* Nassif, A. (2018). *Heterogeneity and centrality of “dark personality” within teams, emergence of shared leadership, and team performance: Test of a moderated-mediation model*. [PhD thesis]. McMaster University.
- \* Nawata, K., Yamaguchi, H., Hatano, T., & Aoshima M. (2015). 職務志向性に基づくチーム構成とチーム・パフォーマンスの関連性: 最大値・最小値分析による検討 [Team composition based on work orientation and team performance: Investigation by analysis of maximum and minimum score in team.]. *Journal of the Japanese Association of Industrial/Organizational Psychology*, 29(1), 29–43.
- \* Ndofor, H. A., Sirmon, D. G., & He, X. (2014). Utilizing the firms resources: How TMT heterogeneity and resulting faultlines affect TMT tasks. *Strategic Management Journal*, 36(11), 1656–1674. <https://doi.org/10.1002/smj.2304>

- \* Neuman, G. A., Wagner, S. H., & Christiansen, N. D. (1999). The relationship between work-team personality composition and the job performance of teams. *Group & Organization Management*, 24(1), 28–45. <https://doi.org/10.1177/1059601199241003>
- \* Neumeyer, X., & Santos, S. C. (2019). A lot of different flowers make a bouquet: The effect of gender composition on technology-based entrepreneurial student teams. *International Entrepreneurship and Management Journal*, 16(1), 93–114. <https://doi.org/10.1007/s11365-019-00603-7>
- Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, 27(3), 521–535. <https://doi.org/10.1016/j.hrmr.2017.01.001>
- \* Nielsen, B. B., & Nielsen, S. (2012). Top management team nationality diversity and firm performance: A multilevel study. *Strategic Management Journal*, 34(3), 373–382. <https://doi.org/10.1002/smj.2021>
- \* Nielsen, S. (2009). Why do top management teams look the way they do? A multilevel exploration of the antecedents of TMT heterogeneity. *Strategic Organization*, 7(3), 277–305. <https://doi.org/10.1177/1476127009340496>
- \* Nielsen, S. (2010). Top management team internationalization and firm performance: The mediating role of foreign market entry. *Management International Review*, 50(2), 185–206. <https://doi.org/10.1007/s11575-010-0029-0>
- \* Nielsen, S., & Huse, M. (2010). The contribution of women on boards of directors: Going beyond the surface. *Corporate Governance: An International Review*, 18(2), 136–148. <https://doi.org/10.1111/j.1467-8683.2010.00784.x>
- \* Niñerola, A., Hernández-Lara, A.-B., & Sánchez-Rebull, M.-V. (2022). Top management team diversity and international expansion: Spanish companies in China. *SAGE Open*, 12(1), 215824402110684. <https://doi.org/10.1177/21582440211068493>
- \* Nüesch, S. (2009). Are demographic diversity effects spurious? *Economic Analysis and Policy*, 39(3), 379–388. [https://doi.org/10.1016/s0313-5926\(09\)50034-3](https://doi.org/10.1016/s0313-5926(09)50034-3)
- Nuijten, M. B., & Polanin, J. R. (2020). “statcheck”: Automatically detect statistical reporting inconsistencies to increase reproducibility of meta-analyses. *Research Synthesis Methods*, 11(5), 574–579. <https://doi.org/10.1002/jrsm.1408>
- \* O’Bannon, D. P. (1998). *Top management team composition: A strategic decision-making perspective of the homogeneity-heterogeneity paradox* [PhD thesis]. University of Maryland, College Park.
- O’Boyle, E. H., Rutherford, M. W., & Banks, G. C. (2014). Publication bias in entrepreneurship research: An examination of dominant relations to performance. *Journal of Business Venturing*, 29(6), 773–784. <https://doi.org/10.1016/j.jbusvent.2013.10.001>
- \* Odoardi, C., Battistelli, A., Guardela, J. L. V., Antino, M., Napoli, G. D., & Piccione, L. (2021). Perceived organizational values and innovation: The role of transactive memory and age diversity in military teams. *Military Psychology*, 33(5), 296–307. <https://doi.org/10.1080/08995605.2021.1962177>
- \* Olson, B. J., Parayitam, S., & Twigg, N. W. (2006). Mediating role of strategic choice between top management team diversity and firm performance: Upper echelons theory revisited. *Journal of Business & Management*, 12(2), 111–126.
- \* Opstrup, N., & Villadsen, A. R. (2014). The right mix? Gender diversity in top management teams and financial performance. *Public Administration Review*, 75(2), 291–301. <https://doi.org/10.1111/puar.12310>
- \* Oradi, J., & Izadi, J. (2019). Audit committee gender diversity and financial reporting: Evidence from restatements. *Managerial Auditing Journal*, 35(1), 67–92. <https://doi.org/10.1108/maj-10-2018-2048>
- \* Orazayeva, A. & Arslan, M. (2021). Impact of the management structure and compensation on financial performance of Kazakhstan companies. *Central Asian Economic Review*, 5(134), 86–105.
- \* Ormiston, M. E., Wong, E. M., & Ha, J. (2022). The role of CEO emotional stability and team heterogeneity in shaping the top management team affective tone and firm performance relationship. *The Leadership Quarterly*, 33(3), 101543. <https://doi.org/10.1016/j.leaqua.2021.101543>
- \* Ozdemir, O., & Erkmen, E. (2022). Top management team gender diversity and firm risk-taking in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 34(5), 1739–1767. <https://doi.org/10.1108/ijchm-06-2021-0719>
- \* Øzenir, E. (2019). *How does functional diversity lead to team innovation? The roles of information elaboration and shared meta-knowledge* [Master’s thesis]. Utrecht University.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Lesley A Stewart, L. A., Thomas, J., Welch, V. A., Whiting, P., Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ* 372, n71. <https://doi.org/10.1136/bmj.n71>
- Page, S. (2019). *The diversity bonus*. Princeton University Press.
- \* Palmer, S. L. (2001). *Executive group decision-making and demographic diversity: Exploring the roles of generating issues and ideas and evaluating outcomes* [PhD thesis]. University of Maryland, College Park.
- \* Pan, A.-L., & Yu, M.-T. (2013). 文化企业高管团队特征与财务绩效关系的实证研究 [Empirical study on the relationship between executive team characteristics and financial performance in cultural enterprises]. *Guangdong Social Sciences*, 5, 5–14.
- \* Pan, S., & Chen, L. (2015). 中外合资上市公司高管团队异质性对企业绩效的影响——以外资持股比例为调节变量 [The Impact of Heterogeneity of Executive Teams in Sino-Foreign Joint Venture Listed Companies on Corporate Performance—With Foreign Shareholding Ratio as a Moderating Variable]. *Enterprise Economy*, 34(4), 90–96.
- \* Pan, Y., Shang, Y., & Xu, J. (2019). When is chronotype diversity related to team creativity? Team temporal leadership as a moderator. *Academy of Management Proceedings*, 2019(1), 18181. <https://doi.org/10.5465/ambpp.2019.48>
- \* Park, S., Kang, S., & Lee, J. (2021). 대학생 크라우드펀딩 특성이 팀성과에 미치는 영향: 기능적 배경 다양성과 공유리더십을 중심으로 [The effects of entrepreneurial human capital on early new venture performance]. *Journal of Human Resources Development Research*, 24(4), 143–161.
- \* Parke, M. R., Seo, M.-G., Hu, X., & Jin, S. (2022). The creative and cross-functional benefits of wearing hearts on sleeves: Authentic affect climate, information elaboration, and team creativity. *Organization Science*, 33(2), 600–623. <https://doi.org/10.1287/orsc.2021.1448>
- \* Parola, H. R., Ellis, K. M., & Golden, P. (2015). Performance effects of top management team gender diversity during the merger and acquisition process. *Management Decision*, 53(1), 57–74. <https://doi.org/10.1108/md-03-2014-0141>
- \* Pathak, S., Samba, C., & Li, M. (2020). Audit committee diversity and financial restatements. *Journal of Management and Governance*, 25(3), 899–931. <https://doi.org/10.1007/s10997-020-09548-4>
- Peeters, M. A. G., van Tuijl, H. F. J. M., Rutte, C. G., & Reymen, I. M. M. J. (2006). Personality and team performance: A meta-analysis. *European Journal of Personality*, 20(5), 377–396. <https://doi.org/10.1002/per.588>

- \* Pegels, C. C., Song, Y. I., & Yang, B. (2000). Management heterogeneity, competitive interaction groups, and firm performance. *Strategic Management Journal*, 21(9), 911–923. [https://doi.org/10.1002/1097-0266\(200009\)21:9<911::aid-smj124>3.0.co;2-9](https://doi.org/10.1002/1097-0266(200009)21:9<911::aid-smj124>3.0.co;2-9)
- \* Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict and performance. *Administrative Science Quarterly*, 44(1), 1–28.
- \* Perkins, D. C., & Fields, D. (2009). Top management team diversity and performance of Christian churches. *Nonprofit and Voluntary Sector Quarterly*, 39(5), 825–843. <https://doi.org/10.1177/0899764009340230>
- \* Perryman, A. A., Fernando, G. D., & Tripathy, A. (2016). Do gender differences persist? An examination of gender diversity on firm performance, risk, and executive compensation. *Journal of Business Research*, 69(2), 579–586. <https://doi.org/10.1016/j.jbusres.2015.05.013>
- \* Pesch, R., Bouncken, R. B., & Kraus, S. (2015). Effects of communication style and age diversity in innovation teams. *International Journal of Innovation and Technology Management*, 12(06), 1550029. <https://doi.org/10.1142/s0219877015500297>
- \* Peters, L., & Karren, R. J. (2009). An examination of the roles of trust and functional diversity on virtual team performance ratings. *Group & Organization Management*, 34(4), 479–504. <https://doi.org/10.1177/1059601107312170>
- \* Peters, L. M. L. (2003). *Now you see them... now you don't: Toward a greater understanding of virtual team effectiveness* [PhD thesis]. University of Massachusetts Amherst.
- Phillips, K. W., Liljenquist, K. A., & Neale, M. A. (2009). Is the pain worth the gain? The advantages and liabilities of agreeing with socially distinct newcomers. *Personality and Social Psychology Bulletin*, 35(3), 336–350. <https://doi.org/10.1177/0146167208328062>
- \* Piaskowska, D., Trojanowski, G., Tharyan, R., & Ray, S. (2021). Experience teaches slowly: Non-linear effects of top management teams' international experience on post-acquisition performance. *British Journal of Management*, 33(4), 1774–1802. <https://doi.org/10.1111/1467-8551.12544>
- \* Pieterse, A. N., van Knippenberg, D., & van Dierendonck, D. (2013). Cultural diversity and team performance: The role of team member goal orientation. *Academy of Management Journal*, 56(3), 782–804. <https://doi.org/10.5465/amj.2010.0992>
- \* Pil-soo, Kim, Y., Jae-jun, & Dae-kwon, K. (2014). 프로스포츠 팀 선수구성의 다양성이 경기력에 미치는 영향: 한국프로농구 팀을 중심으로 [The impact of diversity in the player composition of professional sports teams on performance: A focus on Korean professional basketball teams.]. *Journal of Sport Industry Management, Academic Journal*, 19(5), 85–107.
- \* Ping, C. (2015). 景气循环与金融危机下台湾银行业公司治理对女性高阶管理者比率与经营绩效之影响 [The relationship between corporate governance, proportion of female in top management and operational performance in taiwan banks under business cycle and financial crises] [Master's thesis]. National Taipei University.
- Pitts, D. W., & Jarry, E. M. (2009). Getting to know you: Ethnic diversity, time and performance in public organizations. *Public Administration*, 87(3), 503–518. <https://doi.org/10.1111/j.1467-9299.2009.01776.x>
- \* Plečnik, J. M., & Wang, S. (2020). Top management team intrapersonal functional diversity and tax avoidance. *Journal of Management Accounting Research*, 33(1), 103–128. <https://doi.org/10.2308/jmar-19-058>
- Polanin, J. R., Hennessy, E. A., & Tsuji, S. (2020). Transparency and reproducibility of meta-analyses in psychology: A meta-review. *Perspectives on Psychological Science*, 15(4), 1026–1041. <https://doi.org/10.1177/1745691620906416>
- Polanin, J. R., & Snilstveit, B. (2016). Converting between effect sizes. *Campbell Systematic Reviews*, 12(1), 1–13.
- \* Popli, M., & Raithatha, M. (2022). Implications of overwhelmed leadership: How executive job demands hinder corporate sustainability performance. *Business & Society*, 62(5), 1031–1068. <https://doi.org/10.1177/00076503221120570>
- \* Przybysz, P. M., Duckwitz, S., Mutze-Niewohner, S., & Schlick, C. M. (2013). Investigation of team composition and task-related conflict as determinants of engineering service productivity. In *2013 IEEE International Conference on Industrial Engineering and Engineering Management* (pp. 250–254). <https://doi.org/10.1109/ieem.2013.6962412>
- \* Przybysz, P. M., Duckwitz, S., & Schlick, C. M. (2014). Influence of task characteristics on team performance. *2014 IEEE International Conference on Industrial Engineering and Engineering Management*. <https://doi.org/10.1109/ieem.2014.7058744>
- Pustejovsky, J. E. (2022). *clubSandwich: Cluster-robust (sandwich) variance estimators with small-sample corrections*. <https://doi.org/10.32614/CRAN.package.clubSandwich>
- Pustejovsky, J. E., & Tipton, E. (2021). Meta-analysis with robust variance estimation: Expanding the range of working models. *Prevention Science*. <https://doi.org/10.1007/s11121-021-01246-3>
- \* Putney, D. M. (2003). *SWAT team composition and effectiveness* [PhD thesis]. The University of Tennessee.
- \* Qamar, N., & Malik, A. A. (2022). A quantitative assessment of the impact of homogeneity in personality traits on software quality and team productivity. *IEEE Access*, 10, 122092–122111. <https://doi.org/10.1109/access.2022.3222845>
- \* Qi, M., Armstrong, S. J., Yang, Z., & Li, X. (2022). Cognitive diversity and team creativity: Effects of demographic faultlines, subgroup imbalance and information elaboration. *Journal of Business Research*, 139, 819–830. <https://doi.org/10.1016/j.jbusres.2021.10.027>
- \* Qian, C., Cao, Q., & Takeuchi, R. (2012). Top management team functional diversity and organizational innovation in China: The moderating effects of environment. *Strategic Management Journal*, 34(1), 110–120. <https://doi.org/10.1002/smj.1993>
- \* Qu, X., & Liu, X. (2017). Informational faultlines, integrative capability, and team creativity. *Group & Organization Management*, 42(6), 767–791. <https://doi.org/10.1177/1059601117716008>
- \* Quintana-García, C., Benavides-Velasco, C. A., & Guzmán-Parra, V. F. (2016). Science-based firms going public: The role of patent indicators and top management teams. *Industry and Innovation*, 23(3), 243–259. <https://doi.org/10.1080/13662716.2015.1133278>
- \* Quintana-García, C., Marchante-Lara, M., & Benavides-Chicón, C. G. (2017). Social responsibility and total quality in the hospitality industry: Does gender matter? *Journal of Sustainable Tourism*, 26(5), 722–739. <https://doi.org/10.1080/09669582.2017.1401631>
- \* Quoidbach, J., & Hansenne, M. (2009). The impact of trait emotional intelligence on nursing team performance and cohesiveness. *Journal of Professional Nursing*, 25(1), 23–29. <https://doi.org/10.1016/j.profnurs.2007.12.002>
- R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>. Accessed 20 Dec 2022.
- \* Raithel, K., van Knippenberg, D., & Stam, D. (2021). Team leadership and team cultural diversity: The moderating effects of leader cultural background and leader team tenure. *Journal of Leadership & Organizational Studies*, 28(3), 261–272. <https://doi.org/10.1177/15480518211010763>
- \* Ranganathan, C., & Alfaro, I. (2011). Project performance in global software development teams: Do prior work ties and nationality diversity matter? In *ECIS 2011 Proceedings* (pp 72). <https://aisel.aisnet.org/ecis2011/72>
- \* Rau, D. (2001). *Knowing who knows what: The effect of transactive memory on the relationship between diversity of expertise and*

- performance in top management teams [PhD thesis]. University of Minnesota.
- \* Ray, S. (2016). *Top management team international orientation and cross-border acquisitions* [PhD thesis]. University of Exeter.
- Reimer, N. K., & Sengupta, N. K. (2023). Meta-analysis of the “ironic” effects of intergroup contact. *Journal of Personality and Social Psychology, 124*(2), 362.
- \* Reinert, C., Buengeler, C., Voorn, B., & Homan, A. C. (2022). Stimulating creativity in gender-diverse teams: Testing diversity training in a field experiment. *Academy of Management Proceedings, 2022*(1). <https://doi.org/10.5465/ambpp.2022.13175abstract>
- \* Reizer, A., Schechter, O., & Ein-Dor, T. (2020). The effect of attachment diversity on team performance and the moderating role of perceived organizational support. *Applied Psychology, 70*(4), 1405–1434. <https://doi.org/10.1111/apps.12280>
- \* Ren, R., & Yan, B. (2017, May). Crowd diversity and performance in Wikipedia. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (pp. 6342–6351). <https://doi.org/10.1145/3025453.3025992>
- \* Ren, Y., Chen, J., & Riedl, J. (2016). The impact and evolution of group diversity in online open collaboration. *Management Science, 62*(6), 1668–1686. <https://doi.org/10.1287/mnsc.2015.2178>
- \* Reuveni, Y., & Vashdi, D. R. (2015). Innovation in multidisciplinary teams: The moderating role of transformational leadership in the relationship between professional heterogeneity and shared mental models. *European Journal of Work and Organizational Psychology, 24*(5), 678–692. <https://doi.org/10.1080/1359432x.2014.1001377>
- \* Richard, O. C., & Shelor, R. M. (2002). Linking top management team age heterogeneity to firm performance: Juxtaposing two mid-range theories. *The International Journal of Human Resource Management, 13*(6), 958–974. <https://doi.org/10.1080/09585190210134309>
- \* Richter, A. W., Hirst, G., van Knippenberg, D., & Baer, M. (2012). Creative self-efficacy and individual creativity in team contexts: Cross-level interactions with team informational resources. *Journal of Applied Psychology, 97*(6), 1282–1290. <https://doi.org/10.1037/a0029359>
- \* Rickley, M., Wu, I.-H., & Crawford, E. (2021). International experience as a microfoundation of foreign subsidiary performance: A multilevel model. *Academy of Management Proceedings, 2021*(1), 11704. <https://doi.org/10.5465/ambpp.2021.28>
- \* Ries, B. C., Diestel, S., Wegge, J., & Schmidt, K.-H. (2010a). Altersheterogenität und Gruppeneffektivität—Die moderierende Rolle des Teamklimas [Age heterogeneity and group effectiveness—The moderating role of team climate]. *Zeitschrift für Arbeitswissenschaft, 64*(3), 137–146.
- \* Ries, B. C., Diestel, S., Wegge, J., & Schmidt, K.-H. (2010b). Die Rolle von Alterssalienz und Konflikten in Teams als Mediatoren der Beziehung zwischen Altersheterogenität und Gruppeneffektivität [The role of age salience and conflicts in teams as mediators of the relationship between age heterogeneity and group effectiveness]. *Zeitschrift für Arbeits- und Organisationspsychologie A&O, 54*(3), 117–130. <https://doi.org/10.1026/0932-4089/a000022>
- Rock, D., & Grant, H. (2016). Why diverse teams are smarter. *Harvard Business Review*. <https://hbr.org/2016/11/why-diverse-teams-are-smarter>. Accessed 20 Dec 2022.
- Rodgers, M. A., & Pustejovsky, J. E. (2021). Evaluating meta-analytic methods to detect selective reporting in the presence of dependent effect sizes. *Psychological Methods, 26*(2), 141–160. <https://doi.org/10.1037/met0000300>
- \* Rodrigues, A. R. N. (2012). *Somos diferentes mas pensamos da mesma forma: O impacto das crenças acerca da diversidade e das cognições partilhadas sobre o tempo na eficácia de equipas [We are different but we think alike: The impact of beliefs about diversity and shared cognitions over time on the effectiveness team association]* [Master’s thesis]. Instituto Universitário de Lisboa.
- \* Roh, J. (2017). 표면적 다양성과 심층적 다양성이 팀 성과에 미치는 영향에 관한 연구: 서울시 자치구 팀을 중심으로 [A study on the impact of surface diversity and deep diversity on team performance: Focused on Seoul Metropolitan City Autonomous District Teams]. *Korean Governance Review, 24*(1), 99–128.
- \* Roh, J., & Koo, J. (2019). The impacts of diversity on team innovation and the moderating effects of cooperative team culture. *International Review of Public Administration, 24*(4), 246–263. <https://doi.org/10.1080/12294659.2019.1688124>
- Rose, M. E., & Kitchin, J. R. (2019). pybliometrics: Scriptable bibliometrics using a Python interface to Scopus. *SoftwareX, 10*, 100263. <https://doi.org/10.1016/j.softx.2019.100263>
- \* Rosenauer, D., Homan, A. C., Horstmeier, C. A. L., & Voelpel, S. C. (2015). Managing nationality diversity: The interactive effect of leaders’ cultural intelligence and task interdependence. *British Journal of Management, 27*(3), 628–645. <https://doi.org/10.1111/1467-8551.12131>
- Rubin, D. B. (2004). *Multiple imputation for nonresponse in surveys*. John Wiley & Sons.
- \* Ruigang, Z., & Liyu, C. (2020). 高管团队异质性与公司业绩关系的实证研究 [An empirical study on the relationship between top management team heterogeneity and company performance]. *Financial Theory and Practice, 6*, 86–93.
- \* Ruigrok, W., Georgakakis, D., & Greve, P. (2013). Regionalization strategy and performance. *Multinational Business Review, 21*(1), 6–24. <https://doi.org/10.1108/15253831311309465>
- \* Ruigrok, W., Greve, P., & Engeler, M. (2011). International experiential diversity and performance at project organizations. *Sport, Business and Management: An International Journal, 1*(3), 267–283. <https://doi.org/10.1108/20426781111162675>
- \* Ruiz-Jiménez, J. M., del Mar Fuentes-Fuentes, M., & Ruiz-Arroyo, M. (2014). Knowledge combination capability and innovation: The effects of gender diversity on top management teams in technology-based firms. *Journal of Business Ethics, 135*(3), 503–515. <https://doi.org/10.1007/s10551-014-2462-7>
- \* Saá-Pérez, P. D., Díaz-Díaz, N. L., Aguiar-Díaz, I., & Ballesteros-Rodríguez, J. L. (2015). How diversity contributes to academic research teams performance. *R&D Management, 47*(2), 165–179. <https://doi.org/10.1111/radm.12139>
- \* Sacco, J. M. (2002). *The relationship between team composition and team effectiveness: A multi-level study* [PhD thesis]. Michigan State University.
- \* Sadeghinejad, Z. (2013). *Top management team diversity and firm performance: The effects of team orientation and process—A study of Australian SMEs* [PhD thesis]. Macquarie Graduate School of Management, Macquarie University, Sydney, NSW 2109, Australia.
- \* Sahaym, A., Cho, S. Y., Kim, S. K., & Mousa, F.-T. (2016). Mixed blessings: How top management team heterogeneity and governance structure influence the use of corporate venture capital by post-IPO firms. *Journal of Business Research, 69*(3), 1208–1218. <https://doi.org/10.1016/j.jbusres.2015.09.012>
- \* Sakuda, K. H. (2012). National diversity and team performance in low interdependence tasks. *Cross Cultural Management: An International Journal, 19*(2), 125–141. <https://doi.org/10.1108/13527601211219838>
- \* Sawyer, J. E., Houlette, M. A., & Yeagley, E. L. (2006). Decision performance and diversity structure: Comparing faultlines in convergent, crosscut, and racially homogeneous groups. *Organizational Behavior and Human Decision Processes, 99*(1), 1–15. <https://doi.org/10.1016/j.obhdp.2005.08.006>
- \* Schilpzand, M. C. (2010). *Cognitive diversity and team performance: The roles of team mental models and information processing*. [PhD thesis]. Georgia Institute of Technology.

- \* Schilpzand, M. C., Herold, D. M., & Shalley, C. E. (2010). Members' openness to experience and teams' creative performance. *Small Group Research*, 42(1), 55–76. <https://doi.org/10.1177/1046496410377509>
- \* Schippers, M. C., Den Hartog, D. N., Koopman, P. L., & Wienk, J. A. (2003). Diversity and team outcomes: The moderating effects of outcome interdependence and group longevity and the mediating effect of reflexivity. *Journal of Organizational Behavior*, 24(6), 779–802. <https://doi.org/10.1002/job.220>
- \* Schubert, T., & Tavassoli, S. (2020). Product innovation and educational diversity in top and middle management teams. *Academy of Management Journal*, 63(1), 272–294. <https://doi.org/10.5465/amj.2017.0741>
- \* Segovia, A. O., & Fernández, L. G.-S. (2010). El impacto del tamaño y la diversidad en los procesos y resultados grupales [The impact of size and diversity on group process and outputs]. *Psicothema*, 22(1), 137–142.
- \* Seo, E., Kang, H., & Song, J. (2020). Blending talents for innovation: Team composition for cross-border R&D collaboration within multinational corporations. *Journal of International Business Studies*, 51(5), 851–885. <https://doi.org/10.1057/s41267-020-00331-z>
- \* Seong, J. Y., & Hong, D.-S. (2018). Age diversity, group organizational citizenship behaviour, and group performance: Exploring the moderating role of charismatic leadership and participation in decision-making. *Human Resource Management Journal*, 28(4), 621–640. <https://doi.org/10.1111/1748-8583.12197>
- \* Seong, J. Y., Kristof-Brown, A. L., Park, W.-W., Hong, D.-S., & Shin, Y. (2012). Person-group fit. *Journal of Management*, 41(4), 1184–1213. <https://doi.org/10.1177/0149206312453738>
- \* Sethi, R. (2000). New product quality and product development teams. *Journal of Marketing*, 64(2), 1–14. <https://doi.org/10.1509/jmkg.64.2.1.17999>
- \* Sethi, R., Smith, D. C., & Park, C. W. (2001). Cross-functional product development teams, creativity, and the innovativeness of new consumer products. *Journal of Marketing Research*, 38(1), 73–85. <https://doi.org/10.1509/jmkr.38.1.73.18833>
- \* Shahab, Y., Ntim, C. G., Chengang, Y., Ullah, F., & Fosu, S. (2018). Environmental policy, environmental performance, and financial distress in China: Do top management team characteristics matter? *Business Strategy and the Environment*, 27(8), 1635–1652. <https://doi.org/10.1002/bse.2229>
- \* Shapcott, K. M., Carron, A. V., Burke, S. M., Bradshaw, M. H., & Estabrooks, P. A. (2006). Member diversity and cohesion and performance in walking groups. *Small Group Research*, 37(6), 701–720. <https://doi.org/10.1177/1046496406294545>
- \* Sharp, B. M., Iyer, D. N., & Brush, T. H. (2017). Executive influence on invention and commercialization. *American Journal of Business*, 32(3–4), 134–151. <https://doi.org/10.1108/ajb-11-2016-0036>
- \* Shemla, M., Kearney, E., Wegge, J., & Stegmann, S. (2020). Unlocking the performance potential of functionally diverse teams: The paradoxical role of leader mood. *Journal of Occupational and Organizational Psychology*, 93(3), 530–555. <https://doi.org/10.1111/joop.12303>
- \* Shin, J., & Geon, L. (2018). 이익 유연화가 기업 가치 및 회계정보의 가치 관련성에 미치는 영향: 여성 임원의 역할을 중심으로 [The impact of profit flexibility on corporate value and the value relevance of accounting information: Focusing on the role of female executives]. *Journal of Business Administration*, 4(6), 1,541-1,563.
- \* Shin, S. J., & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator. *Journal of Applied Psychology*, 92(6), 1709–1721. <https://doi.org/10.1037/0021-9010.92.6.1709>
- Siegel, M., Eder, J. S. N., Wicherts, J. M., & Pietschnig, J. (2021). Times are changing, bias isn't: A meta-meta-analysis on publication bias detection practices, prevalence rates, and predictors in industrial/organizational psychology. *Journal of Applied Psychology*, No Pagination Specified-No Pagination Specified. <https://doi.org/10.1037/apl0000991>
- \* Sieweke, J., Bostandzic, D., & Smolinski, S.-M. (2023). The influence of top management team gender diversity on firm performance during stable periods and economic crises: An instrumental variable analysis. *The Leadership Quarterly*, 101703. <https://doi.org/10.1016/j.leaqua.2023.101703>
- \* Silva, S. R. P. da. (2008). *O papel da diversidade na predição da eficácia grupal [The role of diversity in predicting group effectiveness]* [Master's thesis]. Unpublished master's thesis, Coimbra.
- \* Simons, T. (1995). Top management team consensus, heterogeneity, and debate as contingent predictors of company performance: The complementarity of group structure and process. *Academy of Management Proceedings*, 1995(1), 62–66. <https://doi.org/10.5465/ambpp.1995.17536282>
- \* Simons, T., Pelled, L. H., & Smith, K. A. (1999). Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams. *Academy of Management Journal*, 42(6), 662–673. <https://doi.org/10.5465/256987>
- Simonsohn, U. (2018). Two lines: A valid alternative to the invalid testing of U-shaped relationships with quadratic regressions. *Advances in Methods and Practices in Psychological Science*, 1(4), 538–555. <https://doi.org/10.1177/2515245918805755>
- Simonsohn, U., & Gruson, H. (2023). *groundhog: Version-control for CRAN, GitHub, and GitLab packages* [Manual]. <https://doi.org/10.32614/CRAN.package.groundhog>
- \* Smith, A., Houghton, S. M., Hood, J. N., & Ryman, J. A. (2006). Power relationships among top managers: Does top management team power distribution matter for organizational performance? *Journal of Business Research*, 59(5), 622–629. <https://doi.org/10.1016/j.jbusres.2005.10.012>
- \* Smith, K. A. (1991). *The link between top management team dynamics and strategy and performance* [PhD thesis]. University of Maryland, College Park.
- \* Smith, K. G., Smith, K. A., Olian, J. D., Sims Jr, H. P., O'Bannon, D. P., & Scully, J. A. (1994). Top management team demography and process: The role of social integration and communication. *Administrative Science Quarterly*, 412–438.
- \* Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *International Journal of Productivity and Performance Management*, 55(7), 569–593. <https://doi.org/10.1108/17410400610702160>
- \* Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of Management*, 32(1), 132–157. <https://doi.org/10.1177/0149206305277799>
- \* Somech, A., & Drach-Zahavy, A. (2007). Schools as team-based organizations: A structure-process-outcomes approach. *Group Dynamics: Theory, Research, and Practice*, 11(4), 305–320. <https://doi.org/10.1037/1089-2699.11.4.305>
- \* Somech, A., & Drach-Zahavy, A. (2011). Translating team creativity to innovation implementation. *Journal of Management*, 39(3), 684–708. <https://doi.org/10.1177/0149206310394187>
- Srikanth, K., Harvey, S., & Peterson, R. (2016). A dynamic perspective on diverse teams: Moving from the dual-process model to a dynamic coordination-based model of diverse team performance. *Academy of Management Annals*, 10(1), 453–493. <https://doi.org/10.5465/19416520.2016.1120973>
- Stahl, G. K., Maznevski, M. L., Voigt, A., & Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of

- research on multicultural work groups. *Journal of International Business Studies*, 41(4), 690–709. <https://doi.org/10.1057/jibs.2009.85>
- \* Staples, D. S., & Zhao, L. (2006). The effects of cultural diversity in virtual teams versus face-to-face teams. *Group Decision and Negotiation*, 15(4), 389–406. <https://doi.org/10.1007/s10726-006-9042-x>
- \* Stefano, G. D., Novelli, E., & Hetu, M. (2020). *Burying the hatchet? How competition affects the performance benefits of diversity* (1). 2020, Article 1. <https://doi.org/10.5465/ambpp.2020.21050.abstract>
- \* Stewart, M. M., & Johnson, O. E. (2009). Leader—Member exchange as a moderator of the relationship between work group diversity and team performance. *Group & Organization Management*, 34(5), 507–535. <https://doi.org/10.1177/1059601108331220>
- \* Straube, J., Meinecke, A. L., Schneider, K., & Kauffeld, S. (2018). Effects of media compensation on team performance: The role of demographic faultlines. *Small Group Research*, 49(6), 684–722. <https://doi.org/10.1177/1046496418796281>
- \* Su, Q., Luo, L., Lau, D. C., & de Jong, B. (2022). United or divided? Entrepreneurial passion and faultlines in new venture teams. *Journal of Small Business Management*, 1–34. <https://doi.org/10.1080/00472778.2021.2010086>
- \* Subramony, M., & Chadwick, C. (2020). Too much tenure? Nonlinear effects and moderated influences of unit-level tenure and labor productivity. *Human Resource Management*, 60(3), 363–375. <https://doi.org/10.1002/hrm.22023>
- Sulik, J., Bahrami, B., & Deroy, O. (2021). The diversity gap: When diversity matters for knowledge. *Perspectives on Psychological Science*, 17456916211006070. <https://doi.org/10.1177/17456916211006070>
- \* Sung, S. Y., & Choi, J. N. (2019). Effects of diversity on knowledge sharing and creativity of work teams: Status differential among members as a facilitator. *Human Performance*, 32(3–4), 145–164. <https://doi.org/10.1080/08959285.2019.1639712>
- \* Sun-hee, L., & Sang-yoon, L. (2022). 대학생 크라우드펀딩팀 특성이 팀성과에 미치는 영향: 기능적 배경 다양성과 공유리더십을 중심으로 [The relationship between characteristics of the university student crowdfunding team and team performance: Focus on functional diversity and shared-leadership]. *Korea Venture Entrepreneurship Society Venture Entrepreneurship Research Journal*, 17(2), 99–114.
- \* Sun-hee, S. L., & Chan-min, Y. L. (2020). 크라우드펀딩팀 다양성이 크라우드펀딩성과에 미치는 영향 [The impact of crowdfunding team diversity on crowdfunding performance]. *Journal of New Business Management, Academic Journal*, 38(1), 71–95.
- \* Sutarti, S., Syakhroza, A., Diyanty, V., & Dewo, S. A. (2021). Top management team (TMT) age diversity and firm performance: The moderating role of the effectiveness of TMT meetings. *Team Performance Management: An International Journal*, 27(5/6), 486–503. <https://doi.org/10.1108/tpm-01-2021-0006>
- Syed, M. (2019). *Rebel ideas: The power of diverse thinking*. Hachette UK.
- \* Szymanski, M., Alon, I., & Kalra, K. (2021). Multilingual and multicultural managers' effects on team performance: Insights from professional football teams. *Multinational Business Review*, 30(1), 40–61. <https://doi.org/10.1108/mbr-03-2020-0054>
- \* Tagliazucchi, G., Marchi, G., & Balboni, B. (2021). A nonlinear relationship between the team composition and performance in university spin-offs. *Technological Forecasting and Social Change*, 172, 121061. <https://doi.org/10.1016/j.techfore.2021.121061>
- Tajfel, H., Turner, J. C., Austin, W. G., & Worchel, S. (1979). An integrative theory of intergroup conflict. *Organizational Identity: A Reader*, 56(65), 9780203505984–16.
- \* Talavera, O., Yin, S., & Zhang, M. (2018). Tournament incentives, age diversity and firm performance: Evidence from China. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3190278>
- \* Tang, T. (Ya), Fisher, G. J., & Qualls, W. J. (2021). The effects of inbound open innovation, outbound open innovation, and team role diversity on open source software project performance. *Industrial Marketing Management*, 94, 216–228. <https://doi.org/10.1016/j.indmarman.2021.02.013>
- \* Tanikawa, T. & Jung, Y. (2016). Top management team (TMT) tenure diversity and firm performance. *International Journal of Organizational Analysis*, 24(3), 454–470. <https://doi.org/10.1108/ijoa-02-2014-0739>
- \* Tanikawa, T. & Jung, Y. (2018). CEO power and top management team tenure diversity: Implications for firm performance. *Journal of Leadership & Organizational Studies*, 26(2), 256–272. <https://doi.org/10.1177/1548051818789371>
- \* Tanikawa, T., Kim, S., & Jung, Y. (2017). Top management team diversity and firm performance: Exploring a function of age. *Team Performance Management: An International Journal*, 23(3/4), 156–170. <https://doi.org/10.1108/tpm-06-2016-0027>
- \* Taras, V., Baack, D., Caprar, D., Dow, D., Froese, F., Jimenez, A., & Magnusson, P. (2019). Diverse effects of diversity: Disaggregating effects of diversity in global virtual teams. *Journal of International Management*, 25(4), 100689. <https://doi.org/10.1016/j.intman.2019.100689>
- Tavernise, S., & Gebeloff, R. (2021). Census shows sharply growing numbers of Hispanic, Asian and Multiracial Americans. *The New York Times*. <https://www.nytimes.com/2021/08/12/us/us-census-population-growth-diversity.html>. Accessed 20 Dec 2022.
- \* Tekleab, A. G., Karaca, A., Quigley, N. R., & Tsang, E. W. K. (2016). Re-examining the functional diversity–performance relationship: The roles of behavioral integration, team cohesion, and team learning. *Journal of Business Research*, 69(9), 3500–3507. <https://doi.org/10.1016/j.jbusres.2016.01.036>
- \* Teng, C.-L. (2016). 團隊多元化與團隊績效關係之研究-以團隊-成員交換關係為調節變數 [A study on the relationship between team diversity and team performance with team-member exchange relationship as the moderating variable] [Master's thesis]. National Hsinchu University of Education.
- \* Teruel, M., & Segarra-Blasco, A. (2021). Gender, occupational diversity of R&D teams and patents generation: An application to Spanish firms. *R&D Management*, 52(3), 517–529. <https://doi.org/10.1111/radm.12496>
- \* Thompson, N. J. (2011). *Comparing the development of intragroup trust and performance feedback influence in interdisciplinary and homogeneous teams* [PhD thesis]. Virginia Tech.
- \* Timmerman, T. A. (2000). Racial diversity, age diversity, interdependence, and team performance. *Small Group Research*, 31(5), 592–606. <https://doi.org/10.1177/104649640003100505>
- Tipton, E., Pustejovsky, J. E., & Ahmadi, H. (2019). Current practices in meta-regression in psychology, education, and medicine. *Research Synthesis Methods*, 10(2), 180–194. <https://doi.org/10.1002/jrsm.1339>
- \* To, M. L., Fisher, C. D., Ashkanasy, N. M., & Zhou, J. (2021). Feeling differently, creating together: Affect heterogeneity and creativity in project teams. *Journal of Organizational Behavior*, 42(9), 1228–1243. <https://doi.org/10.1002/job.2535>
- \* Todorova, G., Brake, M. R. W., & Weingart, L. R. (2020). Work design and task conflict in interdisciplinary groups. *International Journal of Conflict Management*, 31(4), 623–646. <https://doi.org/10.1108/ijcma-08-2019-0139>
- \* Tovar, J. (2019). Performance, diversity and national identity evidence from association football. *Economic Inquiry*, 58(2), 897–916. <https://doi.org/10.1111/ecin.12861>
- Triana, M. del C., Kim, K., Byun, S.-Y., Delgado, D. M., & Arthur Jr, W. (2021). The relationship between team deep-level diversity



- and team performance: A meta-analysis of the main effect, moderators, and mediating mechanisms. *Journal of Management Studies*, n/a(n/a). <https://doi.org/10.1111/joms.12670>
- \* Trudgen, R. (2013). *Top management team (TMT) antecedents and financial performance outcomes of firm internationalisation: The mediating effect of the competence of the TMT* [PhD thesis]. Monash University.
- \* Tulung, E., Nelwan, O. ., S. ., & Lengkong, V. P. K. J. (2012). Top management team and company performance in big countries vs small countries. *Journal of Economics, Business, and Accountancy Ventura*, 15(1), 59–70.
- \* Tung, H. (2011). 高階經營團隊部門多樣化對企業創新之影響:以吸收能力為調節效果 [The moderating effect of absorptive capacity on the relationship between top management team functional diversity and firm innovation] [Master's thesis]. National Tainan University.
- \* Uman, T., & Smith, E. (2013). Isolated islands in the upper apex of organisations: In search of interaction between the board of directors and the top management team. *Corporate Ownership and Control*, 10(2), 80–90. <https://doi.org/10.22495/cocv10i2art6>
- \* Utoglu, M. (2015). *The role of diversity on team effectiveness in a multinational and multicultural military environment* [PhD thesis]. Old Dominion University.
- \* Valls, V., González-Romá, V., & Tomás, I. (2016). Linking educational diversity and team performance: Team communication quality and innovation team climate matter. *Journal of Occupational and Organizational Psychology*, 89(4), 751–771. <https://doi.org/10.1111/joop.12152>
- \* Valls, V., Tomás, I., González-Romá, V., & Rico, R. (2021). The influence of age-based faultlines on team performance: Examining mediational paths. *European Management Journal*, 39(4), 456–466. <https://doi.org/10.1016/j.emj.2020.10.008>
- Van De Schoot, R., De Bruin, J., Schram, R., Zahedi, P., De Boer, J., Weijdema, F., Kramer, B., Huijts, M., Hoogerwerf, M., Ferdinands, G., Harkema, A., Willemsen, J., Ma, Y., Fang, Q., Hindriks, S., Tummers, L., & Oberski, D. L. (2021). An open source machine learning framework for efficient and transparent systematic reviews. *Nature machine intelligence*, 3(2), 125–133.
- \* van der Vegt, G. S. (2008). De relatie tussen expertise- diversiteit en teaminnovativiteit: De modererende werking van taakafhankelijkheid en taakflexibiliteit [The relationship between expertise diversity and team innovation: The moderating effect of task interdependence and task flexibility]. *Gedrag & Organisatie*, 21(2), 170–183.
- van Dijk, H., Meyer, B., van Engen, M., & Loyd, D. L. (2017). Microdynamics in diverse teams: A review and integration of the diversity and stereotyping literatures. *Academy of Management Annals*, 11(1), 517–557. <https://doi.org/10.5465/annals.2014.0046>
- van Dijk, H., van Engen, M. L., & van Knippenberg, D. (2012). Defying conventional wisdom: A meta-analytical examination of the differences between demographic and job-related diversity relationships with performance. *Organizational Behavior and Human Decision Processes*, 119(1), 38–53. <https://doi.org/10.1016/j.obhdp.2012.06.003>
- \* van Knippenberg, D., Dawson, J. F., West, M. A., & Homan, A. C. (2010). Diversity faultlines, shared objectives, and top management team performance. *Human Relations*, 64(3), 307–336. <https://doi.org/10.1177/0018726710378384>
- \* van Vianen, A. E. M., & Dreu, C. K. W. D. (2001). Personality in teams: Its relationship to social cohesion, task cohesion, and team performance. *European Journal of Work and Organizational Psychology*, 10(2), 97–120. <https://doi.org/10.1080/13594320143000573>
- \* van Zijl, A. L., Vermeeren, B., Koster, F., & Steijn, B. (2020). Interprofessional teamwork in primary care: The effect of functional heterogeneity on performance and the role of leadership. *Journal of Interprofessional Care*, 35(1), 10–20. <https://doi.org/10.1080/13561820.2020.1715357>
- \* van Zijl, A. L., Vermeeren, B., Koster, F., & Steijn, B. (2023). Functional diversity and team innovation: A study on the mediating role of social cohesion in primary care teams. *Health Care Management Review*. <https://doi.org/10.1097/hmr.0000000000000369>
- \* Vandekerckhof, P., Steijvers, T., Hendriks, W., & Voordeckers, W. (2017). Socio-emotional wealth separation and decision-making quality in family firm TMTs: The moderating role of psychological safety. *Journal of Management Studies*, 55(4), 648–676. <https://doi.org/10.1111/joms.12277>
- \* Vandekerckhof, P., Steijvers, T., Hendriks, W., & Voordeckers, W. (2019). The effect of nonfamily managers on decision-making quality in family firm TMTs: The role of intra-TMT power asymmetries. *Journal of Family Business Strategy*, 10(3), 100272. <https://doi.org/10.1016/j.jfbs.2019.01.002>
- \* Vasilescu, B., Posnett, D., Ray, B., van den Brand, M. G. J., Serbrenik, A., Devanbu, P., & Filkov, V. (2015). Gender and tenure diversity in GitHub teams. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 3789–3798). <https://doi.org/10.1145/2702123.2702549>
- \* Vegt, G. S. V. D., & Bunderson, J. S. (2005). Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal*, 48(3), 532–547. <https://doi.org/10.5465/amj.2005.17407918>
- \* Velinov, E., & Kubicek, A. (2013). The role of top management teams heterogeneity in the IPO process. *European Conference on Management, Leadership & Governance*, 325–331. [https://books.google.co.uk/books?hl=en&lr=&id=QUoJBAAQBAJ&oi=fnd&pg=PA325&dq=velinov+ipo+process&ots=k8TfPDTU4d&sig=LYFrkovSNJzg4d1Voch4t02XXU&redir\\_esc=y#v=onepage&q=velinov%20ipo%20process&f=false](https://books.google.co.uk/books?hl=en&lr=&id=QUoJBAAQBAJ&oi=fnd&pg=PA325&dq=velinov+ipo+process&ots=k8TfPDTU4d&sig=LYFrkovSNJzg4d1Voch4t02XXU&redir_esc=y#v=onepage&q=velinov%20ipo%20process&f=false)
- \* Vesga Fajardo, R. A. (2015). *Cognitive complexity of top executive team members and firm performance* [PhD thesis]. Tulane University.
- \* Vicentini, F., & Boccadelli, P. (2016). Career diversity and project performance in the Italian television industry. *Journal of Business Research*, 69(7), 2380–2387. <https://doi.org/10.1016/j.jbusres.2015.10.007>
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36(3), 1–48.
- Viechtbauer, W. (2023). Confidence intervals for R2 in meta-regression models. In *The metafor package documentation*. [https://www.metafor-project.org/doku.php/tips:ci\\_for\\_r2](https://www.metafor-project.org/doku.php/tips:ci_for_r2). Accessed 31 Mar 2024.
- \* Visintin, F., & Pittino, D. (2014). Founding team composition and early performance of university—Based spin-off companies. *Technovation*, 34(1), 31–43. <https://doi.org/10.1016/j.technovation.2013.09.004>
- \* Vodosek, M. (2007). Intragroup conflict as a mediator between cultural diversity and work group outcomes. *International Journal of Conflict Management*, 18(4), 345–375. <https://doi.org/10.1108/10444060710833469>
- \* Wagner, A. (2021). *The rise of the customer success function as catalyst for team innovation: The importance of boundary spanning, knowledge integration, and shared vision* [PhD thesis]. Drexel University.
- \* Walker, E. T., van den Broek, T., Priante, A., & Ehrenhard, M. L. (2023). Patient-activist or ally? Assessing the effectiveness of conscience and beneficiary constituents in disease advocacy fundraising. *Sociology of Health & Illness*, 45(8), 1652–1672. <https://doi.org/10.1111/1467-9566.13655>

- Wallrich, L. (2021). *rsprite2: Identify distributions that match reported sample parameters (SPRITE)*. <https://doi.org/10.32614/CRAN.package.rsprite2>
- Wallrich, L., & Röseler, L. (2024). *metaUI: Create Shiny apps for the exploration of meta-analytic datasets*. <https://lukaswallrich.github.io/metaUI/>. Accessed 31 Mar 2024.
- \* Wang, B. (2020). 高管团队多元化与企业绩效的影响机制研究 [Research on the impact mechanism of top management team diversity on corporate performance] [Master's thesis]. Lanzhou University.
- \* Wang, C.-Y. (2013a). 領導者與團隊成員異質性和團隊績效的關係-以團隊學習為中介效果 [Heterogeneity in leader-team member and team performance: The mediating effect of team learning] [Master's thesis]. National Kaohsiung University of Applied Sciences.
- \* Wang, C.-Y. (2013b). 領導者與團隊成員異質性和團隊績效的關係-以團隊學習為中介效果 [Heterogeneity in leader-team member and team performance: The mediating effect of team learning] [Master's thesis]. National Kaohsiung University of Applied Sciences.
- \* Wang, D.-P., & Chen, J. (2004). 高管团队异质性对企业绩效的影响研究 [Research on the impact of executive team heterogeneity on corporate performance]. *Modern Finance and Economics*, 24(11), 58–62.
- \* Wang, L. (2014). 高层管理团队人口统计学特征对企业绩效关系研究 [Research on the relationship between the demographic characteristics of the top management team and corporate performance] [Master's thesis]. Southwestern University of Finance and Economics.
- \* Wang, M.-L., Chen, W.-Y., Lin, Y.-Y., & Hsu, B.-F. (2010). Structural characteristics, process, and effectiveness of cross-functional teams in hospitals: Testing the I-P-O model. *The Journal of High Technology Management Research*, 21(1), 14–22. <https://doi.org/10.1016/j.hitech.2010.02.003>
- \* Wang, R. (2021). Team diversity and team success in collaborative crowdsourcing. *Communication Studies*, 73(1), 68–84. <https://doi.org/10.1080/10510974.2021.2011355>
- \* Wang, S. (2023). Top management team functional diversity and management forecast accuracy. *Accounting Horizons*, 37(3), 243–278. <https://doi.org/10.2308/horizons-19-108>
- \* Wang, T.-C. (2011). 高階管理團隊特質與外部關係對公司績效之影響—以餐飲業為例 [Effects of TMT characteristics and external social networks on organizational performance: An empirical study of the restaurant industry] [Master's thesis]. National Dong Hwa University, Taiwan.
- \* Wang, X., Ma, L., & Wang, Y. (2015). The impact of TMT functional background on firm performance. *Nankai Business Review International*, 6(3), 281–311. <https://doi.org/10.1108/nbri-11-2013-0040>
- \* Wang, X.-H. (Frank), Kim, T.-Y., & Lee, D.-R. (2016). Cognitive diversity and team creativity: Effects of team intrinsic motivation and transformational leadership. *Journal of Business Research*, 69(9), 3231–3239. <https://doi.org/10.1016/j.jbusres.2016.02.026>
- \* Wang, X.-L., Ma, L., & Wang, Y.-L. (2013). 高管团队职能背景对企业绩效的影响: 以中国信息技术行业上市公司为例 [Impact of executive team functional background on corporate performance: A case study of listed companies in China's IT industry]. *Nankai Business Review*, 16(4), 80–93.
- \* Wang, Y. (2017). 高管团队教育背景特征、股权结构与企业绩效 [Top management team's educational background characteristics, ownership structure, and corporate performance] [Master's thesis]. Nanjing University.
- \* Wang, Y.-N., & Song, T. (2013). 高管团队异质性对R&D投入与企业绩效调节效应研究 [Research on the moderating effect of executive team heterogeneity on R&D investment and corporate performance]. *Modern Finance and Economics*, 33(9), 109–118.
- \* Wang, Y., Wang, Y., & Cheng, H. (2015). 高管团队异质性、战略二元与企业绩效 [Executive team heterogeneity, strategic ambidexterity and corporate performance]. *Research Management*, 36(11), 89–97.
- Webber, S. S., & Donahue, L. M. (2001). Impact of highly and less job-related diversity on work group cohesion and performance: A meta-analysis. *Journal of Management*, 27(2), 141–162. [https://doi.org/10.1016/S0149-2063\(00\)00093-3](https://doi.org/10.1016/S0149-2063(00)00093-3)
- \* Wei, L.-Q., & Lau, C.-M. (2012). Effective teamwork at the top: The evidence from China. *The International Journal of Human Resource Management*, 23(9), 1853–1870. <https://doi.org/10.1080/09585192.2011.610343>
- \* Wei, L.-Q., Lau, C.-M., Young, M. N., & Wang, Z. (2005). The impact of top management team demography on firm performance in China. *Asian Business & Management*, 4(3), 227–250. <https://doi.org/10.1057/palgrave.abm.9200130>
- \* Wei, L.-Q., & Wu, L. (2013). What a diverse top management team means: Testing an integrated model. *Journal of Management Studies*, 50(3), 389–412. <https://doi.org/10.1111/joms.12013>
- \* Wei, W., Siyun, J., & Jianguo, H. (2017). 女性高管、内外部环境与企业绩效 [Female executives, internal and external environment and enterprise performance]. *Journal of Chongqing University of Technology (Social Science)*, 31(7), 58–66.
- Wei, X., Liu, Y., & Chen, S. (2015). 团队人口统计特征多元化与绩效关系的元分析 [A meta-analysis of the relationship between team demographic diversity and team performance]. *Acta Psychologica Sinica*, 47, 1172–1187. <https://doi.org/10.3724/SP.J.1041.2015.01172>
- \* Weiss, J. B., & Sommers, P. M. (2008). Does team racial composition affect team performance in the NBA? *Atlantic Economic Journal*, 37(1), 119–120. <https://doi.org/10.1007/s11293-008-9156-4>
- \* Weisz, N., Vassolo, R. S., Mesquita, L., & Cooper, A. C. (2010). Diversity and social capital of nascent entrepreneurial teams in business plan competitions. *Management Research: Journal of the Iberoamerican Academy of Management*, 8(1), 39–63. <https://doi.org/10.1108/1536-541011047903>
- \* Welbourne, T. M. (1999). *Wall Street likes its women: An examination of women in the top management teams of initial public offerings*. Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. <http://digit.alcommons.ilr.cornell.edu/cahrswp/106>. Accessed 31 Jul 2023.
- \* Welbourne, T. M., Cycyota, C. S., & Ferrante, C. J. (2007). Wall street reaction to women in IPOs. *Group & Organization Management*, 32(5), 524–547. <https://doi.org/10.1177/1059601106291071>
- \* West, M., Patterson, M., Dawson, J., & Nickell, S. (1999). *The effectiveness of top management groups in manufacturing organisations* (436). Centre for Economic Performance, London School of Economics and Political.
- Wickham, H., Averick, M., Bryan, J., Chang, W., McGowan, L. D., François, R., Golemund, G., Hayes, A., Henry, L., Hester, J., Kuhn, M., Pedersen, T. L., Miller, E., Bache, S. M., Müller, K., Ooms, J., Robinson, D., Seidel, D. P., Spinu, V., ... Yutani, H. (2019). Welcome to the Tidyverse. *Journal of Open Source Software*, 4(43), 1686. <https://doi.org/10.21105/joss.01686>
- \* Wickramasinghe, V., & Nandula, S. (2015). Diversity in team composition, relationship conflict and team leader support on globally distributed virtual software development team performance. *Strategic Outsourcing: An International Journal*, 8(2/3), 138–155. <https://doi.org/10.1108/so-02-2015-0007>
- Wiernik, B. M., & Dahlke, J. A. (2020). Obtaining unbiased results in meta-analysis: The importance of correcting for statistical artifacts. *Advances in Methods and Practices in Psychological*

- Science*, 3(1), 94–123. <https://doi.org/10.1177/2515245919885611>
- \* Williams, H. M., Parker, S. K., & Turner, N. (2010). Proactively performing teams: The role of work design, transformational leadership, and team composition. *Journal of Occupational and Organizational Psychology*, 83(2), 301–324. <https://doi.org/10.1348/096317910x502494>
- Williams, K., & O'Reilly, C. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, 20, 77–140.
- \* Williams, R. J. (1993). *The effect of managerial characteristics on M-form implementation time and performance recovery time in M-form adoption* [PhD thesis]. The Florida State University.
- \* Wise, S., Yeganegi, S., & Laplume, A. O. (2022). Startup team ethnic diversity and investment capital raised. *Journal of Business Venturing Insights*, 17, e00314. <https://doi.org/10.1016/j.jbvi.2022.e00314>
- Wood, R. (1986). Task complexity: Definition of the construct. *Organizational Behavior and Human Decision Processes*, 37, 60–82. [https://doi.org/10.1016/0749-5978\(86\)90044-0](https://doi.org/10.1016/0749-5978(86)90044-0)
- \* Wu, B., & Huang, M.-F. (2011). 企业绩效、高管人力资本特征与控制权配置——基于我国中小企业板风险企业的经验数据 [Corporate performance, executive human capital characteristics, and control rights allocation—Based on empirical data from risk enterprises in China's SME board]. *China Soft Science*, 4, 161–174.
- \* Wu, J., Richard, O. C., del Carmen Triana, M., & Zhang, X. (2021). The performance impact of gender diversity in the top management team and board of directors: A multiteam systems approach. *Human Resource Management*, 61(2), 157–180. <https://doi.org/10.1002/hrm.22086>
- \* Wu, J., Richard, O. C., Zhang, X., & Macaulay, C. (2019). Top management team surface-level diversity, strategic change, and long-term firm performance: A mediated model investigation. *Journal of Leadership & Organizational Studies*, 26(3), 304–318. <https://doi.org/10.1177/1548051819848997>
- \* Wu, S. (2021). *Exploiting individual creative inputs for team creativity: A role differentiation approach* [PhD thesis]. University of Groningen.
- \* Wu, X., & Konrad, A. M. (2022). Does age diversity benefit team outcomes, if so, when and how? A moderated mediation model. *Current Psychology*, 42(27), 23874–23890. <https://doi.org/10.1007/s12144-022-03527-8>
- \* Wu, Y. (2018a). 高层管理团队背景特征对企业绩效的影响 [The impact of top management team background characteristics on corporate performance] [Master's thesis]. Nanjing University.
- \* Wu, Y. (2018b). 高管团队异质性、动态能力与企业绩效关系研究 [Research on the relationship between top management team diversity, dynamic capabilities, and corporate performance] [Master's thesis]. Yunnan University of Finance and Economics.
- \* Wu, Z., & Dong, L. (2017). 高管背景特征对房地产企业经营绩效影响研究——基于生命周期视角 [Study on the impact of senior management background characteristics on the operating performance of real estate enterprises—Based on the lifecycle perspective]. *Finance and Accounting Communications*, 19, 31–35+34.
- \* Xia, Z., Yu, H., & Yang, F. (2022). Benevolent leadership and team creative performance: Creative self-efficacy and openness to experience. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.745991>
- \* Xie, F., Yao, X., & Gu, J. (2008). 高层管理团队异质性与企业技术创新绩效关系的实证研究 [An empirical study on the relationship between top management team heterogeneity and enterprise technological innovation performance]. *Science Research Management*, 06, 65–73. <https://doi.org/10.19571/j.cnki.1000-2995.2008.06.010>
- \* Xie, X.-Y., Feng, W., & Hu, Q. (2020). Does new venture team power hierarchy enhance or impair new venture performance? A contingency perspective. *Journal of Business Venturing*, 35(6), 106059. <https://doi.org/10.1016/j.jbusvent.2020.106059>
- \* Xie, X.-Y., Wang, W.-L., & Qi, Z.-J. (2015). The effects of TMT faultline configuration on a firm's short-term performance and innovation activities. *Journal of Management & Organization*, 21(5), 558–572. <https://doi.org/10.1017/jmo.2015.29>
- \* Xinming, D., Yu, L., Xianyi, L., Zhen, Y., & Huan, L. (2020). 高管团队职能异质性与企业绩效关系研究：基于管理者认知和团队冲突的中介分析 [Functional heterogeneity of the executive team and the relationship with corporate performance: An intermediary analysis based on managerial cognition and team conflict]. *管理工程学报 [Journal of Management Engineering]*, 34(3), 32–44.
- Yadav, S., & Lenka, U. (2020). Diversity management: A systematic review. *Equality, Diversity and Inclusion: An International Journal*, 39(8), 901–929. <https://doi.org/10.1108/EDI-07-2019-0197>
- \* Yan, Z., & Zhen, Z. (2012). 性别多样性对团队绩效和创造力影响的研究 [Research on the impact of gender diversity on team performance and creativity]. *Scientific Research Management*, 33(3), 81–88.
- \* Yanadori, Y., Kulik, C. T., & Gould, J. A. (2021). Who pays the penalty? Implications of gender pay disparities within top management teams for firm performance. *Human Resource Management*, 60(4), 681–699. <https://doi.org/10.1002/hrm.22067>
- \* Yang, C.-C. (2013). 團隊多元化、團隊領導者之創新特質對團隊創新影響之研究 [A study on the effect of team diversity, team leader innovative characteristics on team innovation] [Master's thesis]. National Sun Yat-sen University.
- \* Yang, D., & Shim, D. (2009). 프로젝트 팀 내 다양성, 공유리더십 (Shared Leadership), 성과 간의 관계에 대한 연구 [The relationship between diversity, shared leadership, and performance within project teams]. In *Proceedings of the Korean Management Association Convergence Academic Conference* (pp. 1–20). <https://www.dbpia.co.kr/journal/articleDetail?nodeId=NODE06081149>
- \* Yang, L., Xu, C., & Wan, G. (2019). Exploring the impact of TMTs' overseas experiences on innovation performance of Chinese enterprises. *Chinese Management Studies*, 13(4), 1044–1085. <https://doi.org/10.1108/cms-12-2018-0791>
- \* Yang, P., Gao, S.-Y., & Liu, L. (2014). 高管团队特征与创业板上市公司绩效的实证研究 [Empirical study on the characteristics of executive teams and the performance of listed companies on the growth enterprise market]. *Enterprise Economy*, 33(11), 56–61.
- \* Yang, X. (2015). 高层管理团队异质性与企业绩效的影响研究 [Research on the impact of top management team diversity on corporate performance] [Master's thesis]. Nanjing University.
- \* Yao, B., Ma, L., Wang, X., & Li, B. (2015). 高管团队职能异质性与企业绩效的影响：CEO权力的调节作用 [The impact of executive team functional heterogeneity on corporate performance: The moderating role of CEO power]. *China Soft Science*, 2, 117–126.
- \* Yao, J., Liu, X., & He, W. (2021a). How to make use of team knowledge variety? The role of power disparity. *Journal of Knowledge Management*, 26(3), 722–742. <https://doi.org/10.1108/jkm-08-2020-0620>
- \* Yao, J., Liu, X., & He, W. (2021b). The curvilinear relationship between team informational faultlines and creativity: Moderating role of team humble leadership. *Management Decision*, 59(12), 2793–2808. <https://doi.org/10.1108/md-12-2019-1698>
- \* Yap, C.-M., Chai, K.-H., & Lemaire, P. (2005). An empirical study on functional diversity and innovation in SMEs. *Creativity and Innovation Management*, 14(2), 176–190. <https://doi.org/10.1111/j.1476-8691.2005.00338.x>
- \* Yeh, Y.-J., & Chou, H.-W. (2005). Team composition and learning behaviors in cross-functional teams. *Social Behavior and*

- Personality: An International Journal*, 33(4), 391–402. <https://doi.org/10.2224/sbp.2005.33.4.391>
- \* Yi, Y., Ndofor, H. A., He, X., & Wei, Z. (2018). Top management team tenure diversity and performance: The moderating role of behavioral integration. *IEEE Transactions on Engineering Management*, 65(1), 21–33. <https://doi.org/10.1109/tem.2017.2737663>
- \* Yongming, Z., Wenjing, Q., & Jian, Z. (2019). 组织结构惯性、高管团队异质性与企业绩效 [Organizational structure inertia, executive team heterogeneity, and corporate performance]. *财会月刊 [Finance and Accounting Monthly]*, 20(8), 14–20.
- \* Yoo, S. (2020). *The effects of expertise diversity and task interdependence on project team effectiveness: The moderating role of individual autonomy* [PhD thesis]. University of Minnesota.
- \* Yoo, S., Lee, Y., Lee, Y., & Bae, T. J. (2022). Entrepreneurial passion and team performance: Leader passion and passion diversity as moderators. *Academy of Management Proceedings*, 2022(1). <https://doi.org/10.5465/ambpp.2022.12477abstract>
- \* Yousoufoufard, H. (2010). *Cultural intelligence: A new approach to manage teamwork in culturally diverse teams* [PhD thesis]. McMaster University.
- \* Yu, S., & Greer, L. L. (2023). The role of resources in the success or failure of diverse teams: Resource scarcity activates negative performance-detracting resource dynamics in social category diverse teams. *Organization Science*, 34(1), 24–50. <https://doi.org/10.1287/orsc.2021.1560>
- \* Yuan, X., Guo, Z., & Fang, E. (Er). (2014). An examination of how and when the top management team matters for firm innovativeness: The effects of TMT functional backgrounds. *Innovation*, 16(3), 323–342. <https://doi.org/10.1080/14479338.2014.11081991>
- \* Zhang, P. (2007). Top management team heterogeneity and firm performance: An empirical research on Chinese listed companies. *Frontiers of Business Research in China*, 1(1), 123–134. <https://doi.org/10.1007/s11782-007-0008-x>
- \* Zhang, P. (2007). 高层管理团队的异质性与企业绩效的实证研究 [An empirical study on top management team heterogeneity and corporate performance]. *Journal of Management*, 4(4), 501.
- \* Zhang, P. (2018). 高管团队特征、投资效率与企业绩效的关系 [The relationship between top management team characteristics, investment efficiency, and corporate performance] [Master's thesis]. Shanxi University of Finance and Economics.
- \* Zhang, R.-X. (2012). 高阶管理团队特质对经营绩效的影响—CEO的角色 [The impact of top management team on firm performance—The role of CEO] [Master's Thesis]. Tunghai University.
- \* Zhang, W., Sun, S. L., Jiang, Y., & Zhang, W. (2019). Openness to experience and team creativity: Effects of knowledge sharing and transformational leadership. *Creativity Research Journal*, 31(1), 62–73. <https://doi.org/10.1080/10400419.2019.1577649>
- \* Zhang, X. (2014). 高层管理团队异质性与企业绩效关系的研究 [The study of the relationship between top management team diversity and corporate performance] [Master's thesis]. Southwestern University of Finance and Economics.
- \* Zhang, Y., & Hou, L. (2012). The romance of working together: Benefits of gender diversity on group performance in China. *Human Relations*, 65(11), 1487–1508. <https://doi.org/10.1177/0018726712453931>
- \* Zhang, Z., & Peterson, S. J. (2011). Advice networks in teams: The role of transformational leadership and members core self-evaluations. *Journal of Applied Psychology*, 96(5), 1004–1017. <https://doi.org/10.1037/a0023254>
- \* Zheng, W., & Wei, J. (2018). Linking ethnic composition and performance: Information integration between majority and minority members. *Small Group Research*, 49(3), 357–387. <https://doi.org/10.1177/1046496417749727>
- \* Zhengwei, L., Pingping, Z., Xiaomiao, L., & Songyi, X. (2011). 高管团队异质性与企业绩效的影响: 以我国 IT 产业上市公司为例 [The impact of executive team heterogeneity on corporate performance: A case study of listed IT companies in China]. *Journal of Zhejiang University of Technology: Social Sciences Edition*, 10(3), 254–258.
- \* Zhou, W. (2012). *Moderating and mediating effects of shared leadership on the relationship between entrepreneurial team diversity and performance* [PhD thesis]. City University of New York.
- \* Zhou, W. (2014). When does shared leadership matter in entrepreneurial teams: The role of personality composition. *International Entrepreneurship and Management Journal*, 12(1), 153–169. <https://doi.org/10.1007/s11365-014-0334-3>
- \* Zhou, W., Hu, H., & Zey, M. (2015). Team composition of new venture founding teams: Does personality matter? *International Journal of Entrepreneurial Behavior & Research*, 21(5), 673–689. <https://doi.org/10.1108/ijeb-04-2014-0072>
- \* Zhou, W., Vredenburg, D., & Rogoff, E. G. (2013). Informational diversity and entrepreneurial team performance: Moderating effect of shared leadership. *International Entrepreneurship and Management Journal*, 11(1), 39–55. <https://doi.org/10.1007/s11365-013-0274-3>
- \* Zhu, F., Lü, S., & Su, M. (2018). 高管团队异质性、技术创新投入与企业价值 [Executive team heterogeneity, technological innovation investment and corporate value]. *Finance and Accounting Communications*, 30, 64–68.
- \* Zoogah, D. B., Vora, D., Richard, O., & Peng, M. W. (2011). Strategic alliance team diversity, coordination, and effectiveness. *The International Journal of Human Resource Management*, 22(3), 510–529. <https://doi.org/10.1080/09585192.2011.543629>
- \* Zou, H., & Yang, M. (2019). 战略转型期高管性别多样性与公司绩效 [Gender diversity in executive teams during strategic transformation and corporate performance]. *企业经济 [Enterprise Economy]*, 38(4), 102–108.
- \* Zouaghi, F., Garcia-Marco, T., & Martinez, M. G. (2020). The link between R&D team diversity and innovative performance: A mediated moderation model. *Technological Forecasting and Social Change*, 161, 120325. <https://doi.org/10.1016/j.techfore.2020.120325>

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

**Rights** CC BY is applied to the accepted author manuscript arising from this submission.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.