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TEAM VIABILITY'S OUTCOME-INPUT ROLE IN TEAM EFFECTIVENESS: A META-ANALYTIC ATTEMPT TO DISENTANGLE THE CONFOUNDING NATURE OF COMMONLY USED SCALES

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TEAM VIABILITY'S OUTCOME-INPUT ROLE IN TEAM EFFECTIVENESS: A META-ANALYTIC ATTEMPT TO DISENTANGLE THE CONFOUNDING NATURE OF COMMONLY USED SCALES

A DISSERTATION APPROVED FOR THE

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BY THE COMMITTEE CONSISTING OF

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DEDICATION

To my parents, Leslie and Randall Rockwood,
for encouraging me to find wonder in the world.

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"No one achieves anything alone."

- Leslie Knope

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ABSTRACT

The purpose of this study is to examine the unique role of team viability within an input-mediator-output-input (IMOI) framework of team effectiveness. Using meta-analytic estimates, I empirically tested the relationships between team viability and major team mediators, namely affective states, behavioral processes, and team cognition, as well as team performance. I also examined how differences in the measurement of team viability moderate these relationships. Results indicate that team viability is most strongly predicted by affective emergent states, followed by behavioral processes and team cognition. Viability is also incrementally predictive of future affective states beyond scores for past affective states but provides the most incremental validity in the prediction of future team cognition beyond scores for past team cognition. However, viability scores do not provide incremental validity in predicting future performance beyond scores for key team mediating variables. The temporal ordering of findings suggests a serial mediation model in which affective states predict viability, viability predicts team cognition, and team cognition is ultimately the strongest proximal predictor of team performance. Results of moderation analyses point to how differences in the measurement of viability confound the meaning of viability's associations with other constructs in the empirical literature. The content of the viability measure produced meaningful differences in relationships between team viability, the key mediating mechanisms, and team performance, suggesting differences in the content of measures account for important differences in the strength of relationships. Together, these results indicate that viability taps unique variance in team effectiveness suggesting viability has the potential to meaningfully contribute to the team effectiveness literature, though additional refinement is needed for conceptual and measurement clarity.

Team Viability's Outcome-Input Role in Team Effectiveness: A Meta-Analytic Attempt to Disentangle the Confounding Nature of Commonly Used Scales

A wealth of research focuses on predictors of team effectiveness, including inputs, behavioral processes, and emergent states (Kozlowski & Bell, 2013; Mathieu et al., 2019), yet comparatively little research has investigated effectiveness criteria, especially team viability. Though models of team effectiveness theorize multiple criterion dimensions (i.e., performance, satisfaction, and viability, Hackman, 1987; Sundstrom, De Meuse, et al., 1990), research has focused almost exclusively on team performance as evident in many meta-analytic reviews on team dynamics and effectiveness (e.g., De Jong et al., 2016; Gonzalez-Mulé et al., 2020; Wiese et al., 2022; cf. Ryu et al., 2021; Byron et al., 2022).

It is assumed in the literature that team viability can add value to our understanding of team effectiveness. As a proximal effectiveness criteria, viability can serve as an indicator of future team performance, reducing the need for continuous measurements of performance, which are not always readily available (Bell & Marentette, 2011). Moreover, measures of viability may explain additional variance in team effectiveness that performance indicators cannot. Furthermore, in a rapidly changing workplace, where adaptive performance is at a premium, measures of team viability might predict which teams can handle future challenges across a variety of situations. Measures of viability could also be used to identify problems in functioning teams before performance begins to degrade. In general, it is assumed that measures of team viability can contribute meaningfully to the understanding of team effectiveness and can help uncover factors that contribute to sustained team functioning over time. Therefore, properly conceptualizing and studying team viability has theoretical and applied value.

The paucity of research on viability in the team effectiveness literature may be partially due to confusion surrounding the construct. Summarized by Bell and Marentette (2011), team

viability is inconsistently defined, theoretically underdeveloped, measured with ad hoc scales of questionable validity, and conflated with other team outcomes, such as team satisfaction and team cohesion. Together, these issues result in equivocal findings and limit scholars' ability to draw conclusions about viability.

Therefore, the purpose of this study is to examine the unique role of team viability within an input-mediator-output-input (IMOI) framework of team effectiveness (Ilgen et al., 2005; cf. Hackman, 2012). Figure 1 presents the framework for this examination. First, relationships between team viability and team mediators and outputs were meta-analytically summarized. Specifically, relationships between viability scores and three key mediating mechanisms (i.e., affective emergent states, behavioral processes, and team cognition), and team performance were estimated. Second, taking into account the temporal ordering of the measurement of variables, estimates were used in meta-analytic regression analyses to examine (1) team mediating mechanisms (i.e., affective emergent states, behavioral processes, and team cognition) as antecedents of team viability, (2) team viability as an antecedent of the team mediating mechanisms, and (3) viability as an antecedent of team performance. Third and last, the moderating effect of different conceptualizations of team viability on these relationships was examined. The contributions of this research are twofold. First, in testing the unique role of team viability within recursive models of team effectiveness I extend our understanding of viability as an outcome and an input variable and clarify the team effectiveness criterion space. Second, I clarify how different conceptualizations of viability moderate its relationship with other variables while also taking into account the referent of scale items and source of data. In the paragraphs that follow, I provide an overview of team viability, detail what has been found in the extant literature regarding the relationship between team viability and three key team mediating

mechanisms as well as viability's relationships with other team effectiveness outcomes, and outline the construct confusion that has surrounded viability along with how this is likely to impact the observed relationships between team viability scores and scores on other team constructs established as important to team effectiveness.

Perspectives on Team Viability

First introduced by Hackman (1987) as one of three effectiveness criteria (i.e., performance, satisfaction, and viability), Hackman suggested that "the social processes used in carrying out the work [of the team] should maintain or enhance the capability of members to work together on subsequent team tasks" (p. 323). Following Hackman (1987) and an initial burst of interest, research on team viability progressed in a scattered fashion, with confusion developing around the construct. Bell and Marentette (2011) summarized this confusion and proposed a revised definition of the construct, conceptualizing team viability as an emergent state and proximal team effectiveness criterion that captures a team's "capacity for the sustainability and growth required for success in future performance episodes" (p. 276). This definition situates viability within a team's current performance episode yet has explicit implications for the team's future performance episodes. Consequently, viability is explicitly time-bound and must be examined as both an outcome of a past performance episode and as an antecedent in future performance episodes.

Viability and Team Functioning

Team viability's role within models of team effectiveness can be understood within the input-mediator-output-input (IMOI) framework (Ilgen et al., 2005). This recursive model of team functioning suggests team inputs, such as team composition, influence mediators, namely emergent states and behavioral processes, which in turn influence team outputs, such as team

performance and satisfaction. Outputs then become inputs in subsequent performance episodes. By iterating through IMOI cycles, team phenomena are emergent and dynamic (e.g., Mathieu et al., 2015). Within this framework, team viability is conceptualized as an outcome and therefore is both influenced by emergent states and behavioral processes and has an influence on inputs, emergent states, and behavioral processes subsequent performance episodes.

Three overarching mediators that drive team functioning have emerged in major theoretical reviews of the teams literature: (1) affective emergent states, (2) behavioral processes, and (3) team cognition (DeChurch & Mesmer-Magnus, 2010; Gonzalez-Mulé et al., 2020; Ilgen et al., 2005; Kozlowski & Bell, 2003; Kozlowski & Ilgen, 2006; Mathieu et al., 2008). Affective emergent states encompass team members' shared perceptions about the team's capability (e.g., efficacy and potency) or feelings about the experience of being a member of the team (e.g., cohesion, trust, psychological safety) (Rapp et al., 2021) as well as conflict states, namely task, relationship, and process conflict (de Wit et al., 2012; O'Neill et al., 2013). Behavioral processes refer to how team members work together to accomplish the team's goals (i.e., teamwork; Marks et al., 2001). For example, the commonly used framework of Marks et al. (2001) suggests teamwork should be thought of in terms of three temporally-based dimensions: (1) transition processes (e.g., goal specification, strategy monitoring), (2) action processes (e.g., coordination, monitoring progress towards goals), and (3) interpersonal processes (e.g., conflict management, motivation and confidence building). Lastly, team cognition refers to a mental representation of knowledge related to team functioning (DeChurch & Mesmer-Magnus, 2010) and is generally conceptualized as either shared mental models of the team's work (Cannon-Bowers et al., 1993) or transactive memory systems (i.e., the relative expertise of its members, Austin, 2003; Lewis, 2004).

Meta-analyses have shown all three types of mediators contribute to team performance. For example, DeChurch and Mesmer-Magnus (2010) found that each of the three types of mediators were associated with team performance, together explaining 18.4% of the variance in performance. The authors found team cognition had the strongest relationship with team performance (β = .29) followed by affective states (β = .14) and behavioral processes (β = .11). This pattern of results was replicated in meta-analyses by Mesmer-Magnus et al. (2017) (team cognition β = .25, affective states β = .16, and behavioral processes β = .10) and Gonzalez-Mulé et al. (2020) (team cognition β = .29, affective states β = .16, behavioral processes β = .08).

Team Viability and Team Mediating Mechanisms

The empirical literature shows positive relationships between each type of mediator and viability. The relationship between affective states and team viability has been frequently examined in the empirical literature. Positive relationships have been found between team viability and cohesion, ranging from small (*r* = .12-.25, e.g., Chang & Bordia, 2001; Shivers-Blackwell, 2004; Tesluk & Mathieu, 1999) to large effects (*r* = .51-.92, e.g., Chang & Bordia, 2001; De Cooman et al., 2016). Similarly, positive effects have been found for collective efficacy (*r* = .27-.07, e.g., Bayazit & Mannix, 2003; Hartner-Tiefenthaler et al., 2022; Ortega et al., 2010; Pescosolido, 2003), team potency (*r* = .55, e.g., Shivers-Blackwell, 2004), psychological safety (*r* = .43, e.g., Ortega et al., 2010), and team identification (*r* = .33, e.g., You & Robert, 2018). As expected, negative relationships have been found between team viability and team conflict states (*r* = –.14 to –.72, e.g., Balkundi et al., 2009; Barrick et al., 1998; Bayazit & Mannix, 2003; Jehn et al., 2008).

Similarly, evidence suggests team viability is positively related to behavioral processes. Limited initial evidence supports a large positive relationship between transition processes and

team viability, with Hartner-Tiefenthaler et al. (2022) reporting a correlation of .61 and Paolucci et al. (2018) reporting a correlation of .56. Similarly, large positive correlations (*r*s = .68) between action processes and team viability were reported by Resick et al. (2010) and Ohland et al. (2012), with Rousseau and Aubé (2010) reporting a more modest correlation of .27. Lastly, results of investigations into the relationship between interpersonal processes and team viability have shown small (*r* = .23, Tekleab et al., 2009) to large effects (*r* = .63, Mello & Delise, 2015). In their narrative review of the literature, Bell and Marentette (2011) proposed that team viability will be more strongly related to interpersonal processes and transition processes, given that action processes are more relevant to current performance episodes, whereas transition processes and interpersonal processes are more relevant to future performance episodes.

Support has also been found for a positive relationship between team viability and team cognition. Strong positive relationships (*r*s = .63, .78) between transactive memory systems and viability were reported by (Lewis, 2004) and small to moderate positive relationships (*r*s between .02 and .48) were reported by Rentsch and Klimoski (2001a), Resick et al. (2010), Santos and Passos (2013), with Santos and Passos (2013) reporting one small negative effect size (*r* = –.01). Well-developed team cognitive structures allow team members to predict each other's actions, allocate tasks, and reference the team's pool of information (DeChurch & Mesmer-Magnus, 2010). Team viability is particularly relevant to long-term teams or teams that will engage in multiple performance episodes (Bell & Marentette, 2011), allowing these teams to build and maintain shared knowledge structures.

Within this tripartite framework of affective states, behavioral processes, and team cognition, discerning which states and processes influence the future viability of teams will delineate if viability is predicted by factors in a way this is distinct from predictors of

performance. Team viability has often been conceptualized as a predominantly affective construct related to yet meaningfully distinct from performance-based outcomes, but Bell and Marentette (2011) provide a theoretical basis for considering team cognition and behavioral processes as antecedents to viability as well. If scores on measures of team viability in fact represent an outcome that is related to yet meaningfully distinct from performance-based outcomes, then examining the relative contributions of each type of mediator could shed light on its distinctiveness. For instance, if the magnitude of the relationships as well as the rank order of contributions to explaining variance is different for viability scores compared to performance-based outcomes, then such findings would lend support for the distinctiveness of viability as an indicator of team effectiveness. If the relationships and rank order of contributions are similar, then such a pattern of results might suggest that viability is simply an epiphenomenon or by-product of the causal connections between established mediators and performance-based outcomes. Consequently, it is important to examine the relationships each of these types of mediators has with viability as well as their relative contributions. Therefore, I advance the following research questions:

> *Research Question 1:* To what extent do (a) affective emergent states, (b) behavioral processes, and (c) team cognition account for variance in viability scores?
>
> *Research Question 2:* What is the relative importance of affective emergent states, behavioral processes, and team cognition in explaining variance in team viability?
>
> *Research Question 3:* Is the relative importance of affective emergent states, behavioral processes, and team cognition in explaining variance in team viability different from the relationships already evidenced for team performance?

Within the recursive IMOI framework, outcomes from past performance episodes feed into future performance episodes. Theoretically, then, viability should serve as an input for future performance episodes. Indeed, the future focus of team viability suggests that team viability

scores should speak strongly to a team's future performance episodes. Scores should therefore incrementally predict future levels of affective states, behavioral processes, and team cognition. Accordingly, I advance the following research question:

> *Research Question 4:* To what extent do scores on measures of viability predict future (a) affective emergent states, (b) behavioral processes, and (c) team cognition?

> *Research Question 5:* Do viability scores incrementally predict future (a) affective emergent states, (b) behavioral processes, and (c) team cognition beyond past scores for such variables?

Team Viability and Team Performance

Team viability is also thought to be related to a variety of team effectiveness outcomes, performance in particular (Bell & Marentette, 2011). The viability-performance relationship is perhaps one of the most studied. Observed correlations for this relationship are generally positive (e.g., Aubé & Rousseau, 2011; Barrick et al., 1998; Bayazit & Mannix, 2003), though negative correlations have also been observed (e.g., Foo et al., 2006; Lehmann-Willenbrock & Chiu, 2017; Mello & Delise, 2015; Ortega et al., 2010). The magnitude of these correlations generally ranges from small near-zero effects (Sinclair, 2003; Tesluk & Mathieu, 1999) to very large effects (Aubé & Rousseau, 2005; Brodbeck, 2001; Lewis, 2004), with Lewis (2004) reporting a substantial correlation of $r = .80$. Importantly, for team viability to have theoretical and practical value, scores on team viability measures should provide incremental predictive validity over established and frequently used predictors of team performance, including a team's past performance (Bell & Marentette, 2011). Therefore, viability should account for unique variance in the prediction of future team performance over and above past performance. Consequently, I advance the following research question:

> *Research Question 6:* To what extent do scores on measures of viability correlate with team performance within the same performance episode?

Research Question 7: To what extent do scores on measures of viability predict future performance?

Research Question 8: Do viability scores incrementally account for variance in future performance scores beyond past scores for affective states, behavioral processes, and team cognition?

Relationships between team viability and affective team outcomes have also been studied. Team viability has evinced strong positive relationships with team satisfaction, falling between r = .60 (Tesluk & Mathieu, 1999) and r = .92 (Sackett & Fitzsimons, 2021). The magnitude of these observed relationships suggests that these two constructs are highly correlated or possibly that the content of such measures is very similar. The relationship between team viability and team commitment is somewhat less studied, though investigations have shown moderate positive effects (r = .33, Paolucci et al., 2018). Similarly, only Hu and Liden (2015) have examined the relationship between team viability and turnover, finding moderate (r = –.40) to large (r = –.54) negative relationships in two studies.

Relationships between team viability and these effectiveness criteria are critical, especially as viability is frequently confused with satisfaction and commitment. However, much like team viability, both the team satisfaction literature and the team commitment literature lack theoretical development and consistent study. Therefore, I primarily contrast viability with team performance to provide a robust test of viability's unique role within recursive team effectiveness models.

Measurement as a Moderator

Content of Viability Measure

As previously mentioned, substantial confusion has surrounded the conceptualization and measurement of team viability (Bell & Marentette, 2011). Conceptualizations of team viability generally fall into one of three categories: (1) a team's *future capabilities*, (2) team members'

intent or desire to stay on a team, and/or (3) team members' *satisfaction* with membership on the team. Some conceptual definitions only touch on one of these categories, whereas others include multiple. Frequently cited conceptual definitions of team viability are outlined in Table 1. Appendix A presents a complete list of team viability scales and their items.

Each of these definitions has implications for the conceptualization and measurement of team viability. The first conceptualization, that of a team's future capabilities, suggests a focus on the team's skills and abilities needed in subsequent performance episodes. In contrast, the latter two conceptualizations of team viability, that of intent to remain and member satisfaction, evoke an affective or attitudinal focus of team viability. Indeed, viability is often defined as an affective outcome (Mathieu et al., 2008). Therefore, the capability conceptualization is more task and capability based, though it may have an affective component, and the intent to remain and satisfaction conceptualization are strictly affective. Consequently, these three conceptualizations evoke theoretically different psychological phenomena and are therefore likely to be tapping distinct latent constructs.

Further confusing matters, these three conceptualizations of team viability overlap substantially or are simply different names for other variables used in the literature. The conceptualization of team viability as a team's future capabilities mirrors conceptualizations of team potency. Team potency is defined as "perceptions of team capability spanning tasks and situations" (Gully et al., 2002, p. 819). This is markedly similar to capability conceptualizations of team viability with two distinctions. First, definitions of team potency are based on team member's perceptions of the team's capability whereas some definitions of team viability seek to assess the team's capabilities directly (though in practice the two are often operationalized in the same way). Second, team potency is conceptualized quite generally as a global evaluation

(Collins & Parker, 2010) often without reference to a specific performance episode (Guzzo et al., 1993), whereas team viability is conceptualized with explicit reference to a future performance episode. These differences are slight, and it is difficult to say if respondents to self-report scales can distinguish between these constructs. Likewise, it is difficult to say if scores on measures of potency and viability are empirically distinct.

Similarly, the intent to remain conceptualization of team viability overlaps with conceptualizations of team commitment. Like viability, team commitment has been sporadically studied, often as a parallel to the substantially more developed literature on organizational commitment (Mathieu & Zajac, 1990). What literature does examine team commitment conceptualizes the construct in a way that is similar to organizational commitment, with three dimensions: (1) a belief in the team's goals, (2) a willingness to exert effort for the team, and (3) a desire to remain a part of the team (see Bishop & Scott, 2000; Paillé, 2009; Pearce & Herbik, 2004). Here, the intent or desire to remain conceptualization of team viability is conflated with the third dimension of team commitment.

Lastly, the conceptualization of team viability as team satisfaction conflates team viability with team satisfaction. Team satisfaction is often included in reviews of team effectiveness as an affective outcome (Mathieu et al., 2008) and has a substantial literature base, though this literature has yet to be synthesized. Like team viability, team satisfaction is sporadically used in the literature and the theoretical development of the construct is minimal. Some research has examined job satisfaction at a collective or unit level, which includes teams (Harter et al., 2002; Whitman et al., 2010). However, team satisfaction is conceptualized as satisfaction with the team specifically (e.g., Tesluk & Mathieu, 1999), and not as collective job satisfaction, therefore team satisfaction is theoretically distinct from collective job satisfaction.

Research on team satisfaction and team viability has progressed largely siloed under these two different construct labels and conflating them in this way results in construct proliferation (Shaffer et al., 2016).

Given the substantial overlaps between intent to remain and satisfaction conceptualizations with other constructs, the capability-based definition of team viability provides the clearest conceptualization of team viability and is likely the most theoretically useful. Different conceptualizations of team viability are likely to influence the relationship between team viability and other variables. Therefore, I ask the following research question:

> *Research Question 9*: How does the content of the viability measure moderate the relationships between team viability and affective emergent states, behavioral processes, team cognition, and team performance?

Level of Analysis: Measurement Referent and Measurement Source

The referent and source of the measure of viability also has implications for the conceptualization of team viability. Following the compatibility principle (Ajzen, 1985), the measurement of a construct should match the level of conceptualization. Chan's (1998) composition models suggest that measures may use a direct consensus model ("I" as a referent) or a referent shift model ("we" or "team" as a referent). Affective definitions of team viability are conceptualized at the individual level of member's perceptions of the team. These definitions suggest that to examine viability as a shared team property, team member perceptions must be aggregated and evince some degree of agreement between team members. Commonly used measures of team viability use both direct consensus and referent shift models (Table 2).

In their theoretical development of team viability, however, Bell and Marentette (2011) suggest that viability should be considered a global team property (Klein & Kozlowski, 2000) that captures the capabilities of the team as a whole and consequently can be rated by the team

leader. Therefore, both the measurement referent and measurement source may capture unique sources of variance related to the level of analysis of the measurement. To examine the influence of these aspects of measurement on relationships between team viability and key variables, I advance the following research questions:

> *Research Question 10*: How does the referent of the viability measure moderate the relationships between team viability and affective emergent states, behavioral processes, team cognition, and team performance?
>
> *Research Question 11*: How does the source of the viability measure moderate the relationships between team viability and affective emergent states, behavioral processes, team cognition, and team performance?

Method

Literature Search

Seven strategies were employed to identify studies that contain useful effect size estimates for this meta-analysis. First, PsychInfo, ABI/Inform, and ProQuest Digital Dissertations and Theses databases were searched for published and unpublished studies using the keyword "team viability." Second, relevant academic journals (i.e., *Journal of Applied Psychology, Personnel Psychology, Academy of Management Journal, Journal of Management, Administrative Science Quarterly, Journal of Organizational Behavior, Organizational Behavior and Human Decision Processes, The Leadership Quarterly, Journal of Occupational and Organizational Psychology, Human Performance, Small Group Research, and Group* and *Organization Management*) were manually searched for relevant articles. Third, the *Online First, In Press,* and *Articles in Advance* sections of relevant academic journals (i.e., *Academy of Management Journal, Journal of Management, Administrative Science Quarterly, Journal of Organizational Behavior, Organizational Behavior and Human Decision Processes, Small Group Research,* and *Group and Organization Management*) were manually searched to identify

any articles not yet included in online databases. Fourth, requests were sent to authors of published papers on team viability for any unpublished research and/or conference proceedings that included team viability. Fifth, all available conference presentations from the Society for Industrial and Organizational Psychology's Annual Conference (2004-2023), American Psychological Association Annual Conference (2015-2021), Academy of Management Annual Conference (1998-2022), Association for Psychological Science (2013-2022, excluding 2020, cancelled due to COVID-19), and Human Factors and Ergonomics Annual Conference Proceedings (1977-2021) were searched for the term "viab*" or phrase "team viab*" and authors emailed for relevant conference entries. Sixth, reference lists of relevant conceptual reviews (i.e., Bell & Marentette, 2011) and meta-analyses (i.e., Anderson, 2006; Balkundi & Harrison, 2006; Bell, 2004; de Wit et al., 2012; Greer et al., 2018; Sottilare et al., 2018) that included team viability were reviewed for articles. Seventh and last, requests for unpublished work were posted to the websites of the Society of Industrial and Organizational Psychology and the Academy of Management. The literature search concluded in May 2023 and studies published after this date were not considered for inclusion.

Inclusion and Exclusion Criteria

Criteria for inclusion in the meta-analysis were as follows: 1) studies must be written in English, 2) studies must report statistical effect size estimates or all information necessary to compute a correlation between team viability and relevant behavioral process, emergent state, and outcome variables, 3) studies must sample multiple team members (studies that only sample one team member or those with only one member reacting to experimental stimuli that simulate a team were excluded). Conceptual, review, or qualitative studies were excluded. Additionally, as methods for discerning study quality are largely subjective (Siddaway et al., 2019), study quality

was not assessed or used as inclusion/exclusion criteria in the present meta-analysis. These inclusion criteria resulted in a final sample of 112 articles, containing 117 individual studies, 7,792 teams, and 38,642 individuals (Figure 2).

Coding Procedures

For each primary study that met the inclusion criteria outlined above, an undergraduate research assistant and I independently coded relevant information from primary studies. The following information was coded: (1) information for study identification including type of manuscript (e.g., journal article, conference proceeding) and publication status, (2) information regarding research design, (3) information regarding sample characteristics, (4) information and reliability for team viability measures, (5) information and reliability for relevant affective states, behavioral processes, team cognition, and moderator variables, (6) effect size estimates for relationships between team viability and relevant variables. Appendix B presents a detailed coding manual. Variables included in the coding procedure are presented in Figure 1. Authors of studies missing key information were contacted to obtain missing information.

Classification of Mediator and Performance Variables

Mediating mechanisms were coded following the nomological network of team viability depicted in Figure 1. Performance measures were coded as either objective or subjective. Measures were coded as objective if the measure did not rely on individual judgements or ratings, including organizational records, results of experimental tasks, and simulation scores. Measures were coded as subjective if they relied on one or more individual's ratings of a team's performance, including self-report measures, leader reports, and graded projects or assignments.

Classification of Team Viability Measures

To assess the content tapped by extant measures of team viability, 18 raters completed a sorting task similar to Anderson and Gerbing (1991) with items from 17 measures of team viability identified in a preliminary literature search. Participants were given definitions for each of the three broad conceptual categories of team viability (capability, commitment, and satisfaction; Table 3) and asked to sort items into one of the three conceptual categories based on their intuitive understanding of the definition. Average agreement across items within a scale was used to classify each measure as one of the three conceptual categories or a blend of the conceptual categories.

The following rules were applied to provide an overall categorization for each measure: (1) if agreement was .50 or above for one category, the measure was classified within that category, (2) if agreement resulted in one category below .20 and none above .50, the measure was classified as a mixture of the two categories in which it scored the highest, and (3) if agreement resulted in all three categories greater than or equal to .20, the measure was classified as being a mixture of all three conceptual categories. These rules indicate how cleanly a measure reflects one or more conceptual categories by quantifying where raters had a good degree of agreement as well as how consistently items within a scale tapped one or more conceptual categories.

Results of the measure content coding are presented in Table 4. Six measures were classified as satisfaction-focused measures, four as commitment-focused measures, two as capability-focused, and eight measures as a mix of two or more categories. This indicates that these eight measures are either representative of two or more of the content categories or are contaminated with additional constructs. Item-level results are presented in Appendix C. If a

study used a measure that was not included in the coding scheme and could not be coded, it was classified as indeterminate.

Inter-Rater Agreement

To ensure the accuracy and reliability of the coding process, an initial 20 studies were coded by all coders independently and discussed to ensure understanding and consistency in the application of coding procedures and to develop coding rules. Following this initial calibration, all remaining articles were coded. Each primary article was coded independently by two coders. Disagreements between coders were resolved via discussion until consensus was reached. A set of 20 randomly selected studies was checked for agreement. Average agreement was 83%.

Meta-Analytic Procedures

Meta-analytic procedures followed Hunter and Schmidt (2004), and were implemented in R using the *psychmeta* package (Dahlke & Wiernik, 2019). Following the procedures of Wood (2008), studies were screened to ensure the between-study independence of effect sizes included in the meta-analysis. Within-study dependent effect sizes were formed into a composite (Hunter & Schmidt, 2004). Using random-effects modeling, both sample size-weighted mean correlations (barebones meta-analysis) and reliability-corrected correlations were calculated. Corrections for unreliability in both the predictor and criterion were performed with an artifact distribution using coefficient alpha estimates of reliability. Studies reporting effect sizes other than correlations were transformed into correlations. Funnel plots for each of the team mediating mechanisms and performance were examined to detect the presence of publication bias. Uncorrected effect size estimates were plotted by their standard error. Plots were largely symmetrical and did not indicate the presence of publication bias (Appendix D). Indeed, the majority of included studies were unpublished (n = 64) as opposed to published journal articles (n = 47). Leave-one-out

analyses (Huffcutt & Arthur, 1995; Viechtbauer, 2010; Viechtbauer & Cheung, 2010) were conducted to identify influential outliers. Though some points were influential, all mean estimates fell within the confidence intervals of all other leave-one-out subgroups (Appendix D).

Research Questions 1-8 were examined using meta-analytic correlations and secondary-use meta-analytic regression (Oh, 2020) following the recommendations of Borenstein (2009). Research Question 2 was tested using relative weights analysis following Johnson (2000). Meta-analytic estimates resulting from this meta-analysis were used in conjunction with estimates from previously published meta-analyses to populate a correlation matrix (Table 5) between affective states, behavioral processes, team cognition, team performance, and team viability. Following Landis (2013), estimates were first located through other meta-analytic efforts. Estimates that could not be located in another meta-analysis were calculated using the present meta-analytic dataset (Appendix E).

Research Questions 9-11 asked about the moderating effect of measurement features. These research questions were examined using subgroup analyses (Hunter & Schmidt, 2004), in which a correlation is calculated for each subgroup of effect sizes within a moderator category. Comparisons between meta-analytic effect sizes were assessed using the procedure of Zou (2007) by calculating the difference between the two correlations and creating a modified asymptotic 96% confidence interval around the difference score. A meaningful difference between effect sizes was supported if the confidence interval for the difference between the two correlations did not include zero. Correlations were only compared if both subgroups had a *k* size of at least four.

Results

Table 6 presents the results of the meta-analysis for team viability. This table reports sample size-weighted mean correlations, reliability-corrected ρs, confidence intervals, and both relative (SD_ρ, credibility intervals, Cochran's Q) and absolute (I^2) heterogeneity statistics (Kepes et al., 2023) for relationships between team viability and affective emergent states, behavioral processes, team cognition, and team performance. Appendix F reports the differences and modified confidence intervals for comparisons between overall results.

Affective emergent states displayed the strongest relationship with team viability (ρ = .59, SD_ρ = .28), followed by behavioral processes (ρ = .54, SD_ρ = .28), team cognition (ρ = .39, SD_ρ = .20), and lastly performance (ρ = .35, SD_ρ = .25). The estimate for affective states was not meaningfully different from behavioral processes ($\rho_1 - \rho_2$ = .05, CI = –.06, .16), but was meaningfully different from team cognition ($\rho_1 - \rho_2$ = .20, CI = .05, .35). Most mean effect sizes were medium to large, though heterogeneity statistics indicate that there are strong moderators for almost every relationship.

Cohesion and viability were strongly related (ρ = .75, SD_ρ = .26), with task cohesion resulting in a stronger relationship with viability (ρ = .64, SD_ρ = .29) than social cohesion (ρ = .55, SD_ρ = .00), though these estimates are not meaningfully different from one another ($\rho_1 - \rho_2$ = .09, CI = –.14, .32). Psychological safety resulted in the strongest relationship with team viability (ρ = .92, SD_ρ = .20), that was meaningfully different from all other affective states excepting overall cohesion ($\rho_1 - \rho_2$ = .14, CI = –.04, .28). Potency was strongly related to team viability (ρ = .57, SD_ρ = .38), but despite the conceptual similarities between potency and the capability conceptualization of team viability, this relationship was only meaningfully different from psychological safety ($\rho_1 - \rho_2$ = –.35, CI = –.63, –.04). Conflict states were negatively related to team viability (ρ = –.46, SD_ρ = .28), with task conflict resulting in a weaker

relationship with team viability (ρ = –.29, SD_ρ = .41) that was meaningfully different from both relationship (ρ = –.60, $\rho_1 - \rho_2$ = –31., CI = –.54, –.09) and process conflict (ρ = –.59, $\rho_1 - \rho_2$ = .30, CI = .07, .53). This finding mirrors patterns of results from meta-analyses on conflict states that suggest that task conflict is less detrimental to team functioning than either relationship or process conflict (De Dreu & Weingart, 2003; de Wit et al., 2012; O'Neill et al., 2013).

Behavioral processes resulted in moderate to strong relationships with team viability, though effect sizes were not meaningfully different from one another. Team cognition was moderately related to team viability (ρ = .39, SD_ρ = .20), with transactive memory systems yielding a stronger relationship with team viability (ρ = .58, SD_ρ = .20) that was meaningfully different from the viability-shared mental model relationship (ρ = .32, $\rho_1 - \rho_2$ = .26, CI = .02, .49). Relationships between team performance and team viability were small to moderate. Effect size differences between types of performance were not meaningfully different from one another. Estimates for subjective performance resulted in a stronger relationship with team viability (ρ = .45, SD_ρ = .25) that was meaningfully different from the estimate for objective performance (ρ = .18, $\rho_1 - \rho_2$ = .27, CI = .16, .38).

Table 7 presents the results examining moderation by the temporality of the effect sizes, displaying estimates for relationships with contemporaneous measurement and lagged measurement. Again, most heterogeneity statistics were large, suggesting the presence of substantial moderators. Appendix G reports the differences and modified confidence intervals for comparisons between temporal measurements.

Relationships were strongest when measured contemporaneously, except for team cognition, which was stronger when viability was measured as an input (ρ = .56, SD_ρ = .00), though the number of independent effects was small (k = 3). The relationship between team

viability and behavioral processes was strongest when measured concurrently (ρ = .58, SD_ρ = .28), and this estimate was meaningfully different from when viability was measured after behavioral processes ($\rho_1 - \rho_2$ = .20, CI = .03, .37), but not when viability was measured before behavioral processes ($\rho_1 - \rho_2$ = .17, CI = –.02, .35). The relationship between team viability and team performance changed the most as a function of time, with a moderate relationship when measured contemporaneously (ρ = .37, SD_ρ = .25) and a small relationship when viability was measured before team performance (ρ = .18, SD_ρ = .23), and this difference was meaningful ($\rho_1 - \rho_2$ = .19, CI = .04, .35).

Team Viability and Team Mediating Mechanisms

Research Questions 1-5 dealt with the relationship between team viability and the three team mediating mechanisms. As shown in Table 6, results indicate that all three mediating mechanisms are positively related to team viability (Research Question 1), with affective states resulting in the strongest relationship (ρ = .59, SD_ρ = .28), followed by behavioral processes (ρ = .54, SD_ρ = .28), and team cognition (ρ = .39, SD_ρ = .20).

Table 8 displays the results of the relative importance analysis (Research Question 2). Affective emergent states contributed the most to team viability (β = .39, RWI = .21), explaining 48.2% of the explained variation. Behavioral processes followed affective states (β = .28, RWI = .16), explaining 35.8% of the explained variance. Lastly, team cognition contributed the least to team viability (β = .14, RWI = .07), accounting for 16.1% of the explained variation. This pattern of prediction is different from that for team performance (Research Question 3). Team performance is predicted most strongly by team cognition, followed by affective states, and behavioral processes (DeChurch & Mesmer-Magnus, 2010; Gonzalez-Mulé et al., 2020; J. Mesmer-Magnus et al., 2017). In contrast, team viability is predicted most strongly by affective

emergent states (β = .39), followed by behavioral processes (β = .28) and lastly team cognition (β = .14).

Results in Table 7 indicate that all three mediating mechanisms are also predictive of team viability in the same pattern (Research Question 4), with affective states again resulting in the strongest relationship (ρ = .54, SD_ρ = .23), followed by behavioral processes (ρ = .38, SD_ρ = .20), and lastly team cognition (ρ = .33, SD_ρ = .00). Team viability was also incrementally predictive of the mediating mechanisms (Research Question 5). As shown in Table 9, team viability incrementally predicted future affective states beyond past affective states, together explaining 32.5% of the variance in future affective states, accounting for a significant 8.5% change in R^2 due to team viability. Team viability did not significantly incrementally predict future behavioral processes beyond past scores for behavioral processes. Past behavioral processes explained 39.7% of the variance in future behavioral processes, and team viability only explained an additional .3% of the variance in future behavioral processes. Team viability also predicted future team cognition beyond past team cognition, together explaining 35% of the variance in future team cognition, a significant 14.7% increase in variance explained due to team viability.

Team Viability and Team Performance

Research Questions 6-8 concerned the relationship between team viability and team performance. As shown in Table 7, results indicated that viability and performance have a moderate relationship when measured concurrently (ρ = .37, SD_ρ = .25, Research Question 6) and a weak relationship when viability is measured as a predictor of team performance (ρ = .18, SD_ρ = .23, Research Question 7). Table 10 shows the results for team viability's incremental validity in predicting team performance beyond past affective states, behavioral processes, and

team cognition. The results showed a significant but negative effect for viability (β = –.15, p < .01) with a small increase in explained variance (ΔR^2 = .013). The regression weights for affective states and team cognition increased slightly when team viability was added to the model. The negative effect for team viability and increase in explained variance together suggest a small suppression effect. To interrogate this effect, separate models were run for each of the team mediating mechanisms (Table 10). In all three separate models team viability did not yield a significant effect. Altogether, the results suggest that team viability scores do not provide incremental validity in predicting future performance beyond scores for key team mediating variables (Research Question 8).

The Moderating Effects of Measurement Issues

Tables 11-13 report the results of the moderation analyses concerning the content of the viability measure, referent of the measure items, and source of ratings, respectively. Appendix H reports the differences and modified confidence intervals for comparisons between all moderator levels. The number of effect size estimates was below four for most team cognition moderator levels, therefore no comparisons between subgroups were tested.

Content

The content of the viability measure was expected to moderate the relationships between team viability and the three team mediating mechanisms as well as the relationship between team viability and team performance (Research Question 9). As shown in Table 11, the content of the viability measure did not have a clear moderating effect on the relationship between team viability and affective emergent states. Measures with a commitment conceptualization of viability resulted in the strongest relationship (ρ = .79, SD_ρ = .23) and this relationship was meaningfully different from measures with mixed conceptualizations (ρ = .56, $\rho_1 - \rho_2$ = .23, CI =

.03, .43) and measures of indeterminate content (ρ = 50, $\rho_1 - \rho_2$ = .29, CI = .06, .52); however, comparisons between commitment-focused measures and other moderator levels were not meaningfully different.

The content of the viability measure moderated the relationship between viability and behavioral processes (Table 11). Satisfaction-focused measures resulted in a stronger relationship (ρ = .78, SD_ρ = .26) compared to all other moderator levels, namely capability- and commitment-focused measures (ρ = .48, $\rho_1 - \rho_2$ = .30, CI = .01, .59), mixed measures (ρ = .47, $\rho_1 - \rho_2$ = .31, CI = .10, .52), and indeterminate measures (ρ = .35, $\rho_1 - \rho_2$ = .43, CI = .22, .65). Comparisons for all other moderator pairings were not meaningfully different.

The content of the viability measure did not have a clear moderating effect on the relationship between team viability and team performance. Measures with a satisfaction focus were stronger (ρ = .37, SD_ρ = .15) and meaningfully different from measures with a capability and commitment focus (ρ = .12, $\rho_1 - \rho_2$ = .25, CI = .06, .44), but comparisons between satisfaction focused measures and other moderator levels were not meaningfully different. Additionally, mixed measures were stronger (ρ = .47, SD_ρ = .26) and meaningfully different from capability and commitment focused measures (ρ = .12, $\rho_1 - \rho_2$ = –.35, CI = –.55, –.15), but additional comparisons between mixed measures and other moderator levels were not meaningfully different.

Referent

The referent of the measurement was also expected to have an influence on the relationships between team viability and the three team mediating mechanisms as well as the relationship between team viability and team performance (Research Question 10). As shown in Table 12, the referent of the measurement did not have a clear moderating effect on the

relationship between viability and affective states. The relationship was strongest when a direct consensus model was used (ρ = .75, SD_ρ = .23) and confidence intervals indicated that this relationship was meaningfully different from both referent shift (ρ = .35, $\rho_1 - \rho_2$ = .40, CI = .12, .68) and mixed referent measures (ρ = .48, $\rho_1 - \rho_2$ = .18, CI = .01, .35), but not meaningfully different from other comparisons.

Similarly, the measure referent did not result in a clear moderating effect on the team viability-behavioral processes relationship (Table 12). The only comparison that did result in a meaningful difference was that between measures with mixed referents and indeterminate measures ($\rho_1 - \rho_2$ = .21, CI = .03, .40), such that the relationship between viability and behavioral processes was stronger when mixed referent measures were used (ρ = .56, SD_ρ = .31) as opposed to indeterminate measures (ρ = .35, SD_ρ = .16). All other comparisons were not meaningfully different.

The referent of the viability measure moderated the relationship between viability and team performance (Table 12), with a with a referent shift model resulting in the strongest relationship (ρ = .64, SD_ρ = .24) that was meaningfully different from all other comparisons, namely direct consensus models (ρ = .25, $\rho_1 - \rho_2$ = –.39, CI = –.57, –.21), mixed referent measures (ρ = .28, $\rho_1 - \rho_2$ = .36, CI = .22, .50), and indeterminate measures (ρ = .28, $\rho_1 - \rho_2$ = .36, CI = .19, .53).

Source

Lastly, the moderating effect of the source of the team viability measure was tested (Research Question 11). As shown in Table 13, team viability was overwhelmingly measured via self-reports by team members, resulting in small sample sizes for raters outside the team.

Consequently, only comparisons between team members and direct team leaders could be reliably tested.

The source of the measure had a moderating effect on the relationship between viability and affective states, resulting in a meaningful difference between team members and direct team leaders as the source of the measurement ($\rho_1 - \rho_2 = .42$, CI = .29, .55), such that the relationship between viability and affective states was stronger when reported by team members ($\rho = .64$, $SD_\rho = .25$) as opposed to direct team leaders ($\rho = .22$, $SD_\rho = .06$). For the relationship between team viability and behavioral processes, comparisons between team members and direct team leaders did not result in a meaningful difference ($\rho_1 - \rho_2 = .25$, CI = –.03, .53). Lastly, for the relationship between team viability and team performance, a meaningful difference was found between team members and direct team leaders ($\rho_1 - \rho_2 = –.32$, CI = –.48, –.16), such that the relationship between team performance and viability was stronger when reported by direct team leaders ($\rho = .60$, $SD_\rho = .26$) as opposed to team members ($\rho = .28$, $SD_\rho = .21$).

Hierarchical moderator analyses were run to identify potential confounding between moderators and to further investigate the combined effects of measurement moderators where the number of independent effect sizes allowed. Results reinforced the strong relationship between affective states and commitment-focused measures and between behavioral states and satisfaction-focused measures. Results are reported in Appendix I.

Discussion

Results of this meta-analysis show that team viability plays a unique role in models of team effectiveness, though this role is still obscured by measurement issues. Key team mediating mechanisms had a unique pattern of prediction for team viability that was different from the well-established pattern of prediction these mediators have for team performance. This indicates

that measures of viability are tapping distinct variance that is not accounted for by performance measures. Affective states emerged as the strongest predictor of viability, which is unsurprising given viability's frequent conceptualization as an affective outcome. The strong relationship between affective states and viability may indicate that these constructs are conflated, as some measures of viability contain items aligned with affective states like potency or cohesion. As the capability conceptualization is less affectively based, we would expect a weaker relationship between affective states and team viability when using capability-focused measures. Moderation analyses did illustrate this pattern of results, however the number of independent samples for capability-focused measures was too small to reliably test the difference between estimates. This result can be taken as an initial indication that capability-focused measures may be meaningfully distinct from affectively focused conceptualizations of team viability, though additional research is needed to examine this.

Team viability also provided substantial incremental validity in the prediction of both affective emergent states and team cognition, but not in the prediction of behavioral processes. Again, team viability was closely related to affective states, explaining 8.5% of the variance in future affective states. Interestingly, viability was most predictive of team cognition, accounting for 14.7% of the explained variance in future team cognition. Given the affective content of most viability measures and the cognitive focus of team cognition, this finding is somewhat counterintuitive. This finding may indicate that affective outcomes, like satisfaction and commitment, play a role in facilitating subsequent team interactions such that team members are more willing to engage with one another and therefore are able to build stronger shared cognitive structures.

The exact nature of viability's role in team effectiveness is still obfuscated by measurement issues. Measurement moderators resulted in meaningful differences between some subgroups, however, most of these comparisons did not meaningfully differ across all subgroup comparisons. Affective states were more strongly related to viability when the measure was commitment-focused, whereas behavioral processes and performance were more strongly related to viability when the measure was satisfaction-focused. Similarly, affective states were more strongly related to viability when a direct consensus model was used, while performance was more strongly related to viability when a referent shift model was used. Lastly, affective states were more strongly related to viability when rated by team members as opposed to team leaders, while performance was more strongly related to viability when rated by team leaders as opposed to team members. Altogether, moderation results show that differing conceptualizations of team viability, as well as measurement factors (i.e., referent and source), have meaningful implications for relationships between team constructs.

Theoretical Implications

This meta-analysis shows the extent of construct confusion surrounding team viability as well as the impact different conceptualizations and operationalizations can have on key relationships. As currently measured, results suggest that team viability is primarily an affective construct representative of team members' satisfaction with the team and their desire to remain on the team. Results showed that most research on team viability uses operationalizations of viability that overlap with team commitment and team satisfaction or a mixed operationalization that taps multiple theoretical constructs. The strong correlations between affective emergent states and affective viability conceptualizations also suggests substantial overlap between

constructs. Together, these results provide empirical evidence of construct proliferation in the team effectiveness literature.

As Bell and Marentette (2011) have argued, a capability-focused conceptualization of team viability is the most theoretically distinct conceptualization and as such viability should be delineated from affective outcomes. While the theoretical rationale for conceptualizing viability in this way is strong, additional theoretical and empirical work still needs to be done to delineate capability-focused viability from potency. Theoretically, Cooperstein (2017) suggests potency and viability can be delineated by their level of analysis, with potency representing consensus amongst team members regarding the team's capabilities and viability representing the team's future capabilities as a global team property, or objective characteristic of the team characterized at the team-level (Chan, 1998; Kozlowski & Klein, 2000). Potency, then, would represent how the team members themselves feel about the team's capabilities, while viability would represent the team's objective capabilities as a unit, irrespective of the team members' feelings. Empirically, the results of the present study show that viability and potency are strongly related ($\rho = .57$, $SD_\rho = .38$). Additionally, moderator analyses indicated that viability was most often reported by team members, representing a direct consensus model and not a global team property. Taken together, these findings suggest that current measurement of viability is not sufficiently distinct from potency. Future conceptual development and operationalizations of viability should work to further delineate capability-focused viability from potency.

Viability in 21st Century Teams

The question of how best to conceptualize viability is complicated by recent research outlining the evolving characteristics of modern teams. Scholars have noted that the nature of team- and group-based designs is changing as work in the 21st century becomes increasingly

dynamic. Modern teams are characterized by higher degrees of virtuality, teaming with AI or robotic team members, shared leadership and empowerment, and fluid team membership, including multi-team membership (Benishek & Lazzara, 2019; Grossman et al., 2022; Kerrissey et al., 2020; O'Neill et al., 2023; Tannenbaum et al., 2012). Given these changes, is viability applicable to modern teams?

Theory suggests viability is most relevant to stable, ongoing teams that function together for multiple performance episodes (Bell & Marentette, 2011). Such teams are likely to be rarer as dynamic workplaces necessitate the adoption of modern team characteristics. Continuing to conceptualize viability as most relevant to intact teams may therefore delimit its applicability to the smaller subset of teams with more membership stability and longer lifespans.

Alternatively, the characteristics of modern teams could be used to inform future work on viability to make the construct more relevant to a 21st century work context. A well operationalized measure of viability as a team's future capability could capture the dynamism inherent in modern team structures, enabling organizational leaders to make informed decisions about future demands. To adapt to frequent changes in modern workplaces, organizational leaders must know if their teams are likely to meet the demands required by a future performance episode. This requires understanding what resources and skills their teams will need to accomplish future tasks as well as developing team members for future teamwork.

A measure of viability that encompasses modern team characteristics might measure the characteristics of individual team members, the overall team, and even the organizational context. At the individual level, such a measure should consider individual team member skills, enthusiasm for future teaming, and general, transportable teamwork competencies that would serve team members in current and future performance episodes (Cannon-Bowers & Bowers,

2011; Eddy et al., 2013). It should be noted that considerations at the individual level such as these indicate that viability should not be considered a global team property, but instead is more likely a configural property of a team, in which individual level aspects of team members combine to form a configuration that meets (or does not meet) the demands of a future performance episode (Kozlowski & Klein, 2000).

At the team level, a measure of viability accounting for modern team characteristics might take into account behaviors such as action team learning, which accounts for how teams can engage in team learning behaviors that upskill each member of the team irrespective of whether the same team members perform together again (Keiser & Arthur, 2021; Vashdi et al., 2013). Similarly, leaders might want to consider resources, such as technology to enhance virtual interactions, and skills needed for future performance. At the organizational level, leaders must be aware of both the pace and nature of future changes to inform decision-making regarding the skills and resources needed for staffing teams.

Researchers may also want to consider the relevance of affective effectiveness outcomes, like team satisfaction and team commitment, to teams with modern characteristics. Research on virtuality and human-AI teaming suggests that affective states, such as trust and cohesion, are important to teams with these kinds of structures (J. R. Mesmer-Magnus et al., 2011; Schelble et al., 2024). Initial research in this space has found that psychological acceptance of an AI-teammate improves affectively focused team viability (Harris-Watson et al., 2023). Therefore, affective outcomes may lend additional insights into the future performance of modern teams by tapping into these important relational aspects of team functioning.

Overall, a future capability-focused conceptualization of team viability appears to be the clearest conceptualization of the construct. Additional research is needed to theoretically and

empirically delineate the capability conceptualization of viability from potency and additional theoretical work is needed to investigate if viability can meaningfully capture the dynamic elements inherent in modern team structures.

Practical Implications

Results from this study provide evidence in support of the unique role of viability within models of team effectiveness. As currently measured, viability represents an affective effectiveness outcome that reflects the results of affective and attitudinal components of team functioning. Based on the primarily affective conceptualizations of viability, the results of the present meta-analysis suggest that these affective outcomes play a strong role in models of team effectiveness. Viability explained a substantial amount of variance in both future affective states and team cognition, indicating that affective outcomes from one performance episode have a meaningful impact on mediating states in future performance episodes. An alternative model of team functioning proposed by Courtright et al. (2015) suggests there are two pathways to team effectiveness, one that is task focused, including states and behaviors like task conflict, transactive memory systems, and action processes, and another that is relationally focused, including states and behaviors like relationship conflict and interpersonal processes. The results of this meta-analysis lend support to the importance of relational functioning path in teams by illustrating the impact of affective outcomes on future team states. Results also suggest these paths may become intertwined across performance episodes, as viability explained substantial variance in future team cognition, a predominantly task-focused construct.

Bell and Marentette (2011) speculated that, to be a practical addition to the literature, team viability should predict future team performance. The results of this study suggest caution is needed in interpreting the usefulness of team viability in predicting team performance.

Although the zero-order correlation between viability and performance in predictive (lagged) designs was not trivial (ρ = .18), it was weaker than the zero-order correlation in concurrent (contemporaneous) designs (ρ = .37). Moreover, viability added little incremental validity to the prediction of team performance after accounting for affective states, behavioral processes, and team cognition. The small suppression effect observed may reflect a possible mediating or confounding variable influencing the relationship (MacKinnon et al., 2000) or may be a result of confounding in the content of the operationalizations of team viability. Together, these results suggest that, as currently measured, viability is not a useful predictor of team performance and therefore does not serve as a practical means of replacing performance evaluations. Future research might use a well-developed capability-focused measure as described above to further investigate this relationship.

Alternatively, ordering the results of this meta-analysis temporally, serial mediation emerges (Taylor et al., 2008), in which affective states predict viability, viability predicts future team cognition, and team cognition is the strongest proximal predictor of team performance. Ancillary analyses show that in a model of affective states and viability predicting team cognition, of the 18.2% of variance explained in team cognition, 58% is explained by the indirect path of affective states through viability (*ab* R^2 = .105). In turn, in a model of viability and team cognition predicting team performance, of the 17.6% of variance explained in team performance, 39% is explained by the indirect path of viability through team cognition (*ab* R^2 = .068). Serial mediation provides an alternative explanation for the negative effect of viability on team performance, as viability's primary influence on future performance is likely through team cognition. This pattern of results indicates that viability has downstream implications for team

functioning and performance and reinforces the importance of examining team functioning within a temporal framework that accounts for current and future performance episodes.

Lastly, the review of team viability measures provides practical recommendations for researchers interested in measuring viability, as well as satisfaction and commitment. The content coding of viability measures suggests that most scales tap a mix of constructs, whereas only two measures tap capability perceptions. Scholars should be aware of the construct overlap in viability measures and should use scales that are capability-focused when measuring team viability. Additional research is needed to develop a well validated scale of viability that exemplifies a capability focus. Measurement referent and source also had meaningful implications for team viability and its relations. Researchers should consider if the referent of their chosen measurement scale and their sampled source accurately reflect the team conceptualization they are aiming to measure (e.g., team-level referent, team leader source, and global team property conceptualization), as these factors can meaningfully influence effect size estimates.

Limitations and an Agenda for Future Research

A principal limitation of this study is the small number of independent samples representing capability-focused measures. The small sample size limited comparisons between viability conceptualizations, limiting the conclusions that could be drawn from moderation analyses. Developing and validating a well operationalized capability-focused measure of team viability should be the priority for future research on team viability. Paired with the recommendations above for considerations of modern team characteristics, the measure developed by Cooperstein (2017) is a worthwhile first step in this direction.

In addition, future research should determine what factors contribute most to a team's ongoing success and adaptability using longitudinal and dynamic methodologies. The predominantly cross-sectional or simply predictive nature of the empirical literature limits scholars' ability to make claims about what leads to a team's success over time and as such research that addresses this issue is fundamental to developing an accurate measure of team viability.

This study was also unable to fully disentangle the relationship between team viability, team commitment, and team satisfaction due to an insufficient number of independent samples. Moderation results provide initial indications that these constructs have unique relationships with team mediating mechanisms and team performance, warranting further investigation. Results suggest that team commitment is more strongly related to affective states while satisfaction is more strongly related to behavioral processes. These results provide initial insights into the unique role each element of team effectiveness may play in overall team functioning, but future research is needed to advance a more robust picture of the team criterion space.

Lastly, heterogeneity results suggest the presence of moderators for most of the relationships examined in this meta-analysis. Measurement features accounted for some of this variance, but significant heterogeneity remained in most cases even after accounting for measurement differences. Additional research is needed to identify meaningful moderators that may explain the variance in these relationships. Primary level research on viability should measure a team's tenure and membership stability as potential moderators. Lastly, as described above, additional studies should examine how the characteristics of modern teams influence key relationships in viability's nomonological network.

Conclusion

The goal of this meta-analysis was to examine the unique role of team viability in models of team effectiveness while accounting for the influence of different conceptualizations of viability. Results show that affectively conceptualized viability plays a unique role in team effectiveness, but additional conceptual clarity, particularly regarding modern team characteristics and construct overlap with team potency is needed to advance this body of research. With appropriate theoretical development and empirical support, team viability may meaningfully enhance the study of teams by providing a future-focused, adaptive lens through which to view team functioning and overall effectiveness.

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Table 1

Definitions of Team Viability

Citation	Definition
Aubé & Rousseau (2005)	The team's capacity to adapt to internal and external changes as well as the probability that team members will continue to work together in the future
Balkundi et al. (2009)	Team members' willingness to remain in the team
Barrick et al. (1998)	A team's capability to continue functioning as a unit
Bayazit & Mannix (2003)	Member's desire to stay on or leave the team
Bushe & Coetzer (2007)	Maintaining the ability of team members to work together again in the future and satisfaction of group members' needs
Bell & Marentette (2011)	A team's capacity for sustainability and growth required for success in future performance episodes
Hackman (1987)	The social processes used in carrying out the work should maintain or enhance the capability of members to work together on subsequent team tasks
Lewis (2004)	The capability of groups to continue to perform effectively in the future
Marrone et al. (2007)	Team performance, end user satisfaction with a team's output, and the team's ability to function interdependently in the future
Ohland et al. (2012)	The extent to which teammates would want to work with the student again in the future
Rentsch & Klimoski (2001)	The degree to which the process of carrying out the work enhances the capability of members to work together interdependently in the future
Resick et al. (2010)	Member's satisfaction, participation, and willingness to continue working together
Sundstrom et al. (1990)	Members' satisfaction and the group's future prospects as a work unit
Tekleab et al. (2009)	The degree to which members wish to work together as a team in the future
Tesluk & Mathieu (1999)	Group's cohesiveness and members' satisfaction and willingness to continue working together

Table 2

Commonly Used Scales of Team Viability

Citation	Number of Items	Response Scale[a]	Coefficient alpha	Referent	Target	Level/referent of measurement
Aube & Rousseau (2005)	4	5-point	0.84	Team	Team	Referent shift
Balkundi et al. (2009)	2	5-point	0.71	I	Team	Direct consensus
Barrick et al. (1998)	12	5-point	0.82	Mixed	Team	-
Bayazit & Mannix (2003)	3	5-point	0.83	I	Team	Direct consensus
Bushe & Coetzer (2007)	6	Not reported.	0.88-0.93	Mixed	Team	-
Cooperstein (2017)	14	Not reported.	Not reported.	Team	Mixed	Referent shift
Hackman (1988)[b]	7	5-point	0.75	Mixed	Mixed	-
Lehmann-Willenbrock et al. (2011)	2	6-point	0.80	I	Team	Direct consensus
Lewis (2004)	3	Not reported.	0.97	Mixed	Team	-
Marrone et al. (2007)	3	5-point	0.81	Team	Team	Referent shift
Ohland et al. (2012)	3	Not reported.	0.92	I	Member	Direct consensus
Rentsch & Klimoski (2011)	3	7-point	Not reported.	Team	Team	Referent shift
Resick et al. (2010)	7	5-point	0.90	I	Team	Direct consensus
Standifer et al. (2009)	4	7-point	0.83	Mixed	Team	-
Sundstrom et al. (1990)[c]	10	5-point	0.95	Mixed	Mixed	-
Tekleab et al. (2009)	5	7-point	0.89	Mixed	Team	-
Tesluk & Matheiu (1999)	11	Not reported.	Not reported.	Mixed	Team	-

Note. All items for Standifer et al. (2009) could not be located. Information presented in this table reflects the two items from the scale that could be identified.

[a]All measures use a Likert response scale.

[b]The original citation of this measure could not be located. The information in this table is based on articles that have cited this measure. Some of the information was conflicting.

[c]This measure is from Sundstrom et al. (1990), which could not be located. The information in this table is taken from Perkins (1991) which reproduced the measure.

Table 3

Construct Categorization Definitions

Construct	Definition	Adapted from
Team capability perceptions	A team's ability to continue performing effectively in the future	Lewis (2004)
Team commitment	The degree to which members wish to work together as a team in the future	Tekleab et al. (2009)
Team satisfaction	The extent to which team members are pleased with and enjoy being a part of their team	Tesluk & Mathieu (1999)

Table 4

Measure Content Classifications

Overarching Construct(s)	Overall *k*	Scale	Team Capability	Team Commitment	Team Satisfaction
Team capability	3	Cooperstein (2017)	0.73*	0.17	0.09
		DeStephen & Hirokawa (1988); Evans & Jarvis (1986)	0.72*	0.17	0.11
Team commitment	10	Balkundi et al. (2009)	0.08	0.64*	0.28
		Bayazit & Mannix (2003)	0.02	0.69*	0.30
		Lehmann-Willenbrock et al. (2011)	0.00	0.83*	0.17
		Ohland et al. (2012)	0.15	0.59*	0.26
Team satisfaction	26	Barrick et al. (1998)	0.29	0.06	0.64*
		Bushe & Coetzer (2007)	0.12	0.13	0.75*
		Marrone et al. (2007)	0.02	0.33	0.65*
		Resick et al. (2010)	0.02	0.32	0.67*
		Sundstrom et al. (1990)	0.16	0.31	0.53*
		Tesluk & Matheiu (1999)	0.04	0.35	0.60*
Team capability & commitment	10	Lewis (2004)	0.48	0.39	0.13
		Standifer et al. (2009)	0.42	0.47	0.11
Team commitment & satisfaction	2	Rentsch & Klimoski (2011)	0.15	0.37	0.48
Team capability, commitment, & satisfaction	39	Aube & Rousseau (2005)	0.49	0.24	0.28
		Hackman (1988)	0.26	0.24	0.49
		Tekleab et al. (2009)	0.42	0.38	0.20
		Sinclair (2003)	0.24	0.33	0.43
		Resick et al. (2010); Cooperstein (2016)	0.40	0.25	0.35

Note. * Values ≥ 0.50 indicating 50% or more of item ratings were in a given category. Values without an asterisk indicate that raters were not able to reliably discern categories for items.

Table 5

Meta-Analytic Correlation Matrix for Team Mediating Mechanisms, Team Performance, and Team Viability

	1	2	3	4
1. Affective emergent states	*.49 (31, 1,726)*			
2. Behavioral processes	.53[a] (7, 812)	*.63 (8, 390)*		
3. Team cognition	.37[b] (17, 860)	.38[d] (44, 2,973)	*.45 (7, 499)*	
4. Team viability (overall)	.59 (71, 4,868)	.54 (49, 3,109)	.39 (14, 885)	
Contemporaneous measurement	.61 (58, 4,024)	.58 (40, 2,438)	.51 (10, 565)	*.80 (11, 620)*
Viability measured as an outcome	.54 (26, 1,723)	.38 (17, 1,098)	.33 (10, 727)	
Viability measured as an input	.53 (12, 786)	.41 (10, 511)	.56 (3, 98)	
5. Team performance				.35 (91, 5,353)
Contemporaneous measurement	.29[c] (195, 12,023)	.31[a] (40, 3,125)	.35[e] (107, 7,778)	.37 (86, 5,108)
Viability measured as an outcome				.27 (12, 590)
Viability measured as an input				.18 (13, 777)

Note. Reported as ρ (*k, N*). Overall viability estimates include measurements at all time points. Correlations on the diagonal are autoregressive correlations.

[a]LePine et al. (2008); interpersonal processes-cohesion, behavioral processes-performance.

[b]DeChurch and Mesmer-Magnus (2010); team cognition-motivational states.

[c]Grossman et al. (2022); cohesion-performance.

[d]Mesmer-Magnus et al. (2017); team cognition-behavioral processes.

[e]Niler et al. (2021); team cognition-performance.

Table 6

Overall Results of Meta-Analysis

						95% CI		80% CrI			
	k	***N***	***r***	**ρ**	***SD*ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Affective emergent states[ab]	71	4,868	.49	.59	.28	.52	.66	.23	.95	475.53*	85.28%
Cohesion[de]	36	2,632	.62	.75	.26	.66	.84	.41	1.00	252.64*	86.15%
Task cohesion	9	395	.49	.64	.29	.42	.86	.27	1.00	31.75*	74.80%
Social cohesion	10	543	.45	.55	.00	.47	.62	.55	.55	6.80	0%
Potency[f]	8	363	.50	.57	.38	.30	.85	.09	1.00	66.07*	89.41%
Psychological safety[fghij]	9	1,067	.68	.92	.20	.78	1.00	.66	1.00	67.20*	88.09%
Efficacy[gkl]	12	816	.52	.61	.22	.47	.74	.33	.88	53.23*	79.33%
Empowerment[h]	6	244	.39	.46	.45	.08	.84	–.12	1.00	42.46*	88.22%
Identification[dik]	4	271	.14	.17	.32	–.17	.51	–.24	.57	17.61*	82.97%
Conflict states[ejl]	28	2,238	–.39	–.46	.28	–.58	–.35	–.82	–.11	175.91*	84.65%
Relationship conflict[m]	22	1,900	–.51	–.60	.22	–.71	–.50	–.89	–.31	106.54*	80.29%
Task conflict[mn]	17	1,645	–.24	–.29	.41	–.49	–.09	–.81	.23	214.15*	92.53%
Process conflict[n]	6	351	–.48	–.59	.08	–.71	–.47	–.69	–.48	7.17	30.31%
Behavioral processes[c]	49	3,109	.44	.54	.28	.45	.62	.17	.90	270.10*	82.23%
Action processes	15	950	.52	.61	.28	.46	.77	.26	.97	97.41*	85.63%
Transition processes	5	436	.62	.72	.17	.56	.89	.51	.94	21.16*	81.10%
Interpersonal processes	14	1,097	.45	.54	.25	.39	.68	.21	.86	77.61*	83.25%
Communication/information sharing	25	1,395	.42	.53	.36	.38	.68	.07	.99	170.36*	85.91%
Learning processes	5	288	.43	.56	.26	.30	.83	.23	.90	15.36*	73.97%
Adaptive processes	2	91	.41	.49	.32	–.01	.98	.07	.91	5.68*	82.39%
Team cognition[a]	14	885	.33	.39	.20	.26	.52	.13	.66	41.17*	68.43%
Transactive memory systems[o]	7	337	.45	.58	.20	.39	.76	.33	.83	15.77*	61.96%
Shared mental models[o]	9	616	.28	.32	.17	.18	.46	.10	.54	22.69*	64.75%
Performance[bc]	91	5,353	.29	.35	.25	.29	.41	.02	.67	366.97*	75.47%
Unspecified performance[p]	87	5,125	.30	.35	.26	.29	.42	.02	.68	361.78*	76.23%
Adaptive performance	2	125	.32	.36	.27	–.06	.77	.01	.70	5.39*	81.44%
Routine performance	—	—	—	—	—	—	—	—	—	—	—
Creativity/Innovation[p]	7	328	.17	.21	.19	.02	.40	–.04	.45	13.10*	54.19%

Subjective performance$_q$	68	3,602	.38	.45	.25	.38	.52	.13	.76	266.34*	74.84%
Objective performance$_q$	31	2,081	.14	.18	.16	.10	.26	–.03	.39	65.03*	53.87%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance. Effect sizes for conflict states were reverse-coded when calculating the overall affective emergent states effect size. Constructs at the same level of moderator analysis (e.g., affective emergent states versus performance, subjective versus objective performance, relationship conflict versus task conflict) with the same subscripts have meaningfully different effect size estimates based on modified asymptotic 95% confidence intervals (Zou, 2007).

Table 7

Results of Meta-Analysis Moderated by the Temporality of Measurement

						95% CI		80% Crl			
	k	***N***	***r***	**ρ**	***SD*ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Affective emergent states											
Contemporaneous measurement	58	4,024	.51	.61	.31	.53	.70	.22	1.00	466.36*	87.78%
Viability measured as an outcome	26	1,723	.45	.54	.19	.45	.63	.29	.79	84.60*	70.45%
Viability measured as an input	12	786	.44	.53	.23	.38	.68	.23	.83	49.05*	77.57%
Behavioral processes											
Contemporaneous measurement$_a$	40	2,438	.47	.58	.28	.48	.67	.21	.94	223.72*	82.57%
Viability measured as an outcome$_a$	17	1,098	.31	.38	.27	.23	.52	.03	.72	74.48*	78.52%
Viability measured as an input	10	511	.33	.41	.20	.25	.57	.15	.66	23.57*	61.81%
Team cognition											
Contemporaneous measurement	10	565	.42	.51	.20	.36	.65	.25	.76	27.33*	67.07%
Viability measured as an outcome	10	727	.27	.33	.18	.19	.46	.10	.55	24.80*	63.70%
Viability measured as an input	3	98	.47	.56	.00	.37	.76	.56	.56	2.00	0%
Performance											
Contemporaneous measurement$_b$	86	5,108	.31	.37	.25	.31	.43	.04	.69	353.38*	75.95%
Viability measured as an outcome	12	590	.23	.27	.28	.09	.46	−.09	.64	44.35*	75.19%
Viability measured as an input$_b$	13	777	.15	.18	.23	.03	.32	−.12	.47	38.86*	69.12%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance. Temporality design factors under the same construct with the same subscripts have meaningfully different effect size estimates based on modified asymptotic 95% confidence intervals (Zou, 2007).

Table 8

Regression and Relative Weights Analysis of Team Mediating Mechanisms on Team Viability

	Team viability			
	β	*SE*	Raw relative weights	Relative weights as a % of R^2
Affective emergent states	.390***	.025	.210	48.20%
Behavioral processes	.280***	.025	.156	35.80%
Team cognition	.139***	.025	.070	16.10%
R^2	.436***			

Note. All coefficients are standardized. Harmonic mean = 1,367.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 9

Incremental Validity of Team Viability in Predicting Team Mediating Mechanisms

	Future affective emergent states			
	β	*SE*	β	*SE*
Past affective emergent states	.490***	.023	.265***	.027
Team viability			.368***	.027
R^2	.240***		.325***	
ΔR^2			.085***	

	Future behavioral processes			
	β	*SE*	β	*SE*
Past behavioral processes	.630***	.031	.591***	.039
Team viability			.067	.039
R^2	.397***		.400***	
ΔR^2			.003	

	Future team cognition			
	β	*SE*	β	*SE*
Past team cognition	.450***	.061	.222***	.064
Team viability			.447***	.064
R^2	.203***		.350***	
ΔR^2			.147***	

Note. All coefficients are standardized. Affective states harmonic mean = 1,428. Behavioral processes harmonic mean = 608. Team cognition harmonic mean = 215.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 10

Incremental Validity of Team Viability in Predicting Team Performance

	Performance			
	β	*SE*	β	*SE*
Past affective emergent states	.117*	.047	.167***	.050
Past behavioral processes	.154**	.047	.165***	.047
Past team cognition	.248***	.043	.309***	.047
Team viability			–.149**	.051
R^2	.168***		.181***	
ΔR^2			.013**	
	β	*SE*	β	*SE*
Past affective states	.290***	.041	.271***	.048
Team viability			.037	.048
R^2	.084***		.085***	
ΔR^2			.001	
	β	*SE*	β	*SE*
Past behavioral processes	.310***	.040	.284***	.044
Team viability			.064	.044
R^2	.096***		.099***	
ΔR^2			.003	
	β	*SE*	β	*SE*
Past team cognition	.350***	.040	.363***	.048
Team viability			–.023	.048
R^2	.122***		.123***	
ΔR^2			.001	

Note. All coefficients are standardized. Harmonic mean = 556.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 11

Results of Meta-Analytic Moderation for the Content of Team Viability Measure

						95% CI		80% CrI			
	k	***N***	***r***	**ρ**	***SD*ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	I^2
Affective emergent states	71	4,868	.49	.59	.28	.52	.66	.23	.95	475.53*	85.28%
Capability	3	187	.37	.44	.34	.03	.85	.01	.87	14.27*	85.99%
Commitment$_{ab}$	9	912	.66	.79	.23	.63	.95	.49	1.00	64.86*	87.67%
Satisfaction	14	1,045	.48	.58	.25	.43	.72	.26	.89	72.92*	82.17%
Capability & commitment	6	435	.50	.59	.22	.40	.79	.31	.87	23.31*	78.55%
Commitment & satisfaction	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3$_a$	20	1,101	.47	.56	.24	.44	.68	.25	.87	81.13*	76.58%
Indeterminate$_b$	20	1,263	.42	.50	.35	.34	.67	.05	.95	156.49*	87.86%
Behavioral processes	49	3,109	.44	.54	.28	.45	.62	.17	.90	270.10*	82.23%
Capability	—	—	—	—	—	—	—	—	—	—	—
Commitment	—	—	—	—	—	—	—	—	—	—	—
Satisfaction$_{abc}$	12	722	.64	.78	.26	.62	.94	.44	1.00	73.45*	85.02%
Capability & commitment$_a$	5	569	.40	.48	.25	.24	.72	.16	.81	27.82*	85.62%
Commitment & satisfaction	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3$_b$	21	1,192	.38	.47	.27	.34	.60	.12	.81	88.61*	77.43%
Indeterminate$_c$	10	513	.28	.35	.16	.20	.49	.14	.55	18.24*	50.66%
Team cognition	14	885	.33	.39	.20	.26	.52	.13	.66	41.17*	68.43%
Capability	—	—	—	—	—	—	—	—	—	—	—
Commitment	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	2	130	.47	.56	.08	.36	.76	.47	.66	1.38	27.59%
Capability & commitment	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	2	111	.40	.48	.00	.33	.63	.48	.48	.61	0%
Mix of all 3	7	461	.23	.27	.13	.13	.41	.11	.43	10.59	43.33%
Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Performance	91	5,353	.29	.35	.25	.29	.41	.02	.67	366.97*	75.47%
Capability	2	74	.10	.12	.53	–.67	.91	–.56	.81	8.46*	88.17%

Commitment	5	247	.21	.25	.22	.01	.49	–.04	.53	11.21*	64.33%
Satisfaction$_{a}$	21	1,261	.31	.37	.15	.28	.45	.17	.56	43.11*	53.61%
Capability & commitment$_{ab}$	9	837	.10	.12	.23	–.05	.29	–.18	.42	36.94*	78.34%
Commitment & satisfaction	2	111	.56	.66	.11	.44	.88	.52	.80	1.85	46.00%
Mix of all 3$_{b}$	31	1,805	.40	.47	.26	.37	.57	.14	.80	138.37*	78.32%
Indeterminate	22	1,093	.26	.31	.23	.19	.43	.01	.61	65.70*	68.04%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_{ρ} = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance. Content moderators under the same construct with the same subscripts have meaningfully different effect size estimates based on modified asymptotic 95% confidence intervals (Zou, 2007).

Table 12

Results of Meta-Analytic Moderation for the Referent of Team Viability Measure

						95% CI		80% Crl			
	k	***N***	***r***	**ρ**	***SD*ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Affective emergent states	71	4,868	.49	.59	.28	.52	.66	.23	.95	475.53*	85.28%
Direct consensus$_{ab}$	12	1,163	.63	.75	.23	.61	.89	.46	1.00	82.33*	86.64%
Referent shift$_{a}$	8	585	.29	.35	.32	.11	.59	–.06	.76	48.51*	85.57%
Mixed$_{b}$	33	2,068	.48	.57	.24	.48	.67	.26	.88	153.56*	79.16%
Indeterminate	19	1,127	.48	.57	.30	.42	.72	.18	.96	120.56*	85.07%
Behavioral processes	49	3,109	.44	.54	.28	.45	.62	.17	.90	270.10*	82.23%
Direct consensus	4	281	.52	.64	.28	.35	.93	.29	.99	19.78*	84.83%
Referent shift	4	291	.46	.57	.15	.37	.76	.37	.76	7.89	61.98%
Mixed$_{a}$	31	2,024	.46	.56	.31	.45	.68	.17	.96	208.57*	85.62%
Indeterminate$_{a}$	10	513	.28	.35	.16	.20	.49	.14	.55	18.24*	50.66%
Team cognition	14	885	.33	.39	.20	.26	.52	.13	.66	41.17*	68.43%
Direct consensus	3	222	.35	.42	.19	.16	.68	.17	.67	6.61*	69.73%
Referent shift	2	111	.40	.48	.00	.33	.63	.48	.48	0.61	0%
Mixed	8	525	.29	.35	.25	.15	.55	.03	.67	29.06*	75.91%
Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Performance	91	5,353	.29	.35	.25	.29	.41	.02	.67	366.97*	75.47%
Direct consensus$_{a}$	12	547	.21	.25	.15	.12	.38	.06	.44	19.03	42.18%
Referent shift$_{abc}$	19	1,095	.54	.64	.24	.52	.76	.33	.95	93.33*	80.71%
Mixed$_{b}$	41	2,773	.23	.28	.20	.20	.35	.02	.54	125.76*	68.19%
Indeterminate$_{c}$	20	1,013	.24	.28	.22	.16	.40	.00	.57	55.74*	65.91%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_{ρ} = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance. Referent moderators under the same construct with the same subscripts have meaningfully different effect size estimates based on modified asymptotic 95% confidence intervals (Zou, 2007).

Table 13

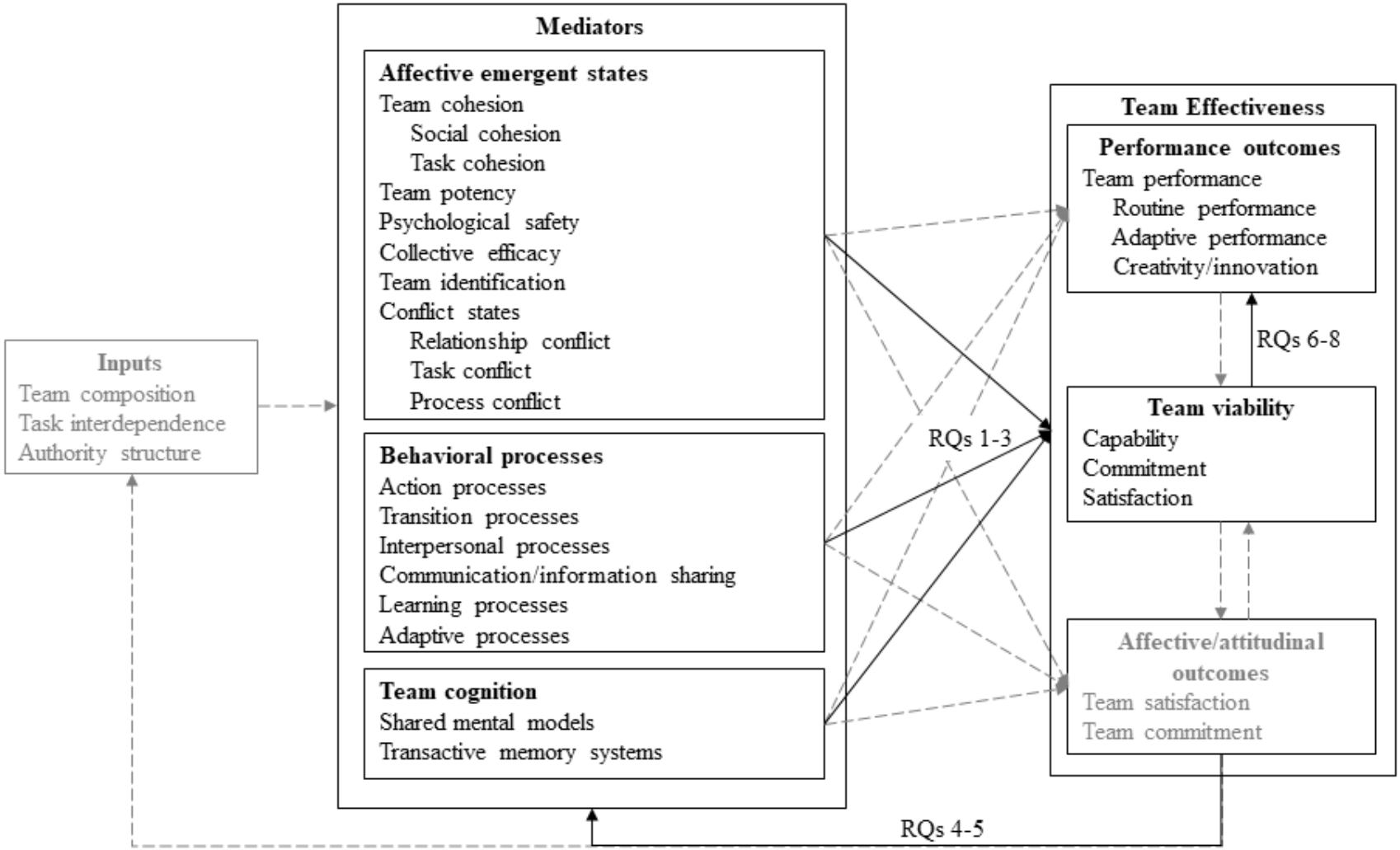
Results of Meta-Analytic Moderation for the Source of Team Viability Measure

						95% CI		80% Crl			
	k	***N***	***r***	**ρ**	***SD*ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Affective emergent states	71	4,868	.49	.59	.28	.52	.66	.23	.95	475.53*	85.28%
Team members$_a$	62	4,357	.54	.64	.25	.58	.71	.32	.97	373.91*	83.69%
Direct team leaders$_a$	8	456	.19	.22	.06	.11	.34	.15	.30	7.96	12.09%
Raters outside team	2	92	.21	.25	.34	–.28	.77	–.19	.68	4.82*	79.27%
Behavioral processes	49	3,109	.44	.54	.28	.45	.62	.17	.90	270.10*	82.23%
Team members	40	2,512	.48	.59	.25	.50	.68	.27	.91	191.83*	79.67%
Direct team leaders	7	516	.28	.34	.32	.08	.60	–.07	.75	40.38*	85.14%
Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Team cognition	14	885	.33	.39	.20	.26	.52	.13	.66	41.17*	68.43%
Team members	12	751	.29	.35	.16	.23	.47	.14	.55	24.79*	55.62%
Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Performance	91	5,353	.29	.35	.25	.29	.41	.02	.67	366.97*	75.47%
Team members$_a$	76	4,336	.23	.28	.21	.22	.34	.01	.55	223.66*	66.47%
Direct team leaders$_a$	13	862	.50	.60	.26	.45	.75	.27	.93	73.25*	83.62%
Raters outside team	3	216	.50	.59	.08	.44	.75	.49	.70	3.13	36.08%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance. Source moderators under the same construct with the same subscripts have meaningfully different effect size estimates based on modified asymptotic 95% confidence intervals (Zou, 2007).

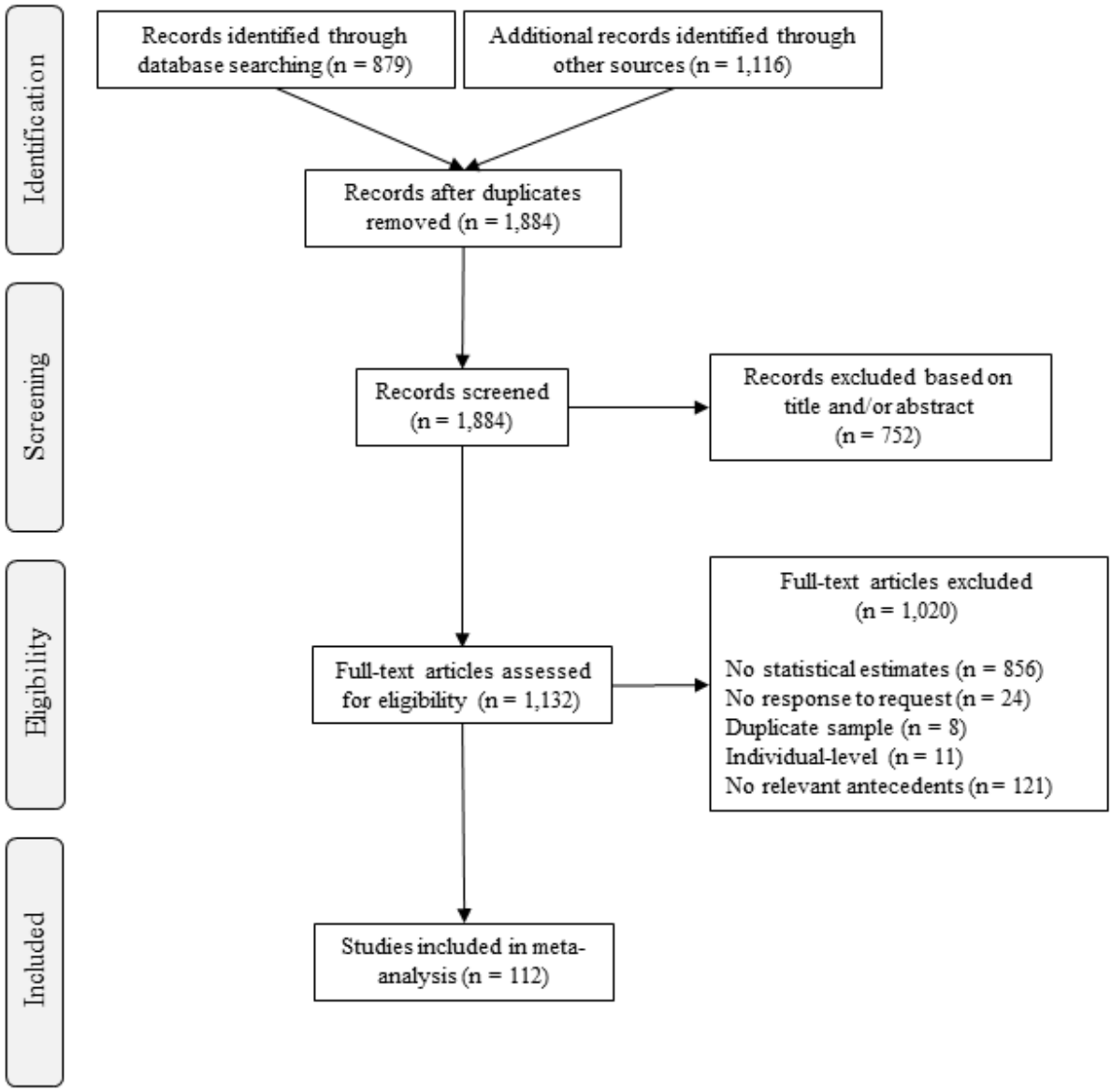
Figure 1

Nomonological Network of Team Viability



Note. Solid lines represent relationships tested in this meta-analysis. Gray dashed lines are not examined in this meta-analysis.

Figure 2
Prisma Diagram for Included Studies



Appendices

Appendix A
Self-Report Measures of Team Viability

Citation	Items
Aube & Rousseau 2005	1. Team members adjust to the changes that happen in their work environment. 2. When a problem occurs, the members of this team manage to solve it. 3. The new members are easily integrated into this team. 4. The members of this team could work a long time together.
Balkundi et al. 2009	1. I would like to work in this unit one year from now. 2. I have thought about changing work units since beginning to work in this unit.
Barrick et al. 1998	1. This section has helped me to meet the personal goals I had in mind when I joined it. 2. I feel that working with this particular section will enable me to attain my personal goals. 3. I believe that my personal well-being has been improved as a result of participating in this section. 4. I believe my section approaches its task in an organized manner. 5. This section accomplished what it set out to do. 6. My section achieves as much as I thought we would. 7. This section should continue to function as a section. 8. This section is capable of working together as a unit. 9. This section probably should work together in the future. 10. I have learned a lot from participating in this section. 11. The section has influenced me in a lot of positive ways. 12. I think this section has been very helpful to me.
Bayazit & Mannix 2003	1. If I could have left this team and worked with another team, I would have (R). 2. I wouldn't hesitate to participate on another task with the same team members. 3. If given the choice, I would prefer to work with another team rather than this one (R).
Bushe & Coetzer 2007	*Satisfaction with membership* 1. Being a member of this team has been personally satisfying. 2. I would choose this team to work with on similar tasks in the future. 3. Being a member of this team was a positive experience.

Satisfaction with output

4. I am satisfied with the final project of this team.
5. We did an excellent job on our case analysis.
6. The team's final paper is better than what I could have done on my own.

Cooperstein 2017

1. The members of this team could work for a long time together.
2. Most of the members of this team would welcome the opportunity to work as a group again in the future.
3. This team has the capacity for long-term success.
4. This team has what it takes to be effective in the future.
5. This team would work well together in the future.
6. This team has positioned itself well for continued success.
7. This team has the ability to perform well in the future.
8. This team has the ability to function as an ongoing unit.
9. This team should continue to function as a unit.
10. This team has the resources to perform well in the future.
11. This team is well positioned for growth over time.
12. This team can develop to meet future challenges.
13. This team has the capacity to sustain itself.
14. This team has what it takes to endure in future performance episodes.

Hackman 1988—Flight Crew Survey

1. I am looking forward to continuing as a member of this team.
2. Members of the team care a lot about it, and work together to make it one of the best.
3. Working with members of the team is an energizing and uplifting experience.
4. As a team, this work group shows signs of falling apart (R).
5. Every time we attempt to straighten out a member of the team, whose behavior is not acceptable, things seem to get worse rather than better (R).
6. I have done much of my work on this project independently of the team (R).
7. I have learned a lot from my teammates on this project.
8. Members of this team share responsibility for leadership.
9. Some members in the team do not carry their fair share of the overall workload (R).
10. Sometimes, one of us refuses to help another team member out (R).
11. There is a lot of unpleasantness among members in the team (R).

Lehmann-Willenbrock et al. 2011

1. I would like to keep working in this team for a long time.
2. I would like to continue to work together with the other members of my team.

Lewis 2004

1. This team would perform well together in the future.

2. If I had the choice of working on this team again, I would do it.
3. If we were assigned to another project, I am confident that this team would work well together.

Marrone et al. 2007

1. Team members have found being a member of this team to be a very satisfying experience.
2. Most team members feel like they are learning a great deal by working on this project.
3. Most of the members of this team would welcome the opportunity to work as a group again in the future.

Ohland et al. 2012

1. I would gladly work with this individual in the future.
2. If I were selecting members for a future work team, I would pick this person.
3. I would avoid working with this person in the future (R).

Rentsch & Klimoski 2011

1. Members look forward to team meetings.
2. Team members 'carry their weight'.
3. Members are highly committed to the team.

Resick et al. 2010

1. I really enjoyed being part of this team.
2. I get along with the people on this team.
3. I felt like I get a lot out of being a member of this team.
4. I'm very happy that I was a member of this team.
5. I wouldn't hesitate to participate on another task with the same team members.
6. If I could have left this team and worked with another team, I would have (R).
7. If given the choice, I would prefer to work with another team rather than this one (R).

Standifer et al. 2009 (*incomplete*)

1. I would not hesitate in participating with this team in future competitions.
2. This team can perform well in future projects.
3. –
4. –

Sundstrom et al. 1990

1. All in all, I find it a pleasure to be a member of this team.
2. All team members did his or her share of the work.
3. All team members participated in the team project.
4. All team members pulled their own weight.

5. All team members were willing to contribute to the team's success.
6. I am pleased to be a member of this team.
7. I found it personally satisfying to be a member of my team.
8. I would like to continue working with this team.
9. Most everyone on my team would want to work together in the future.
10. Nobody on my team wanted to switch to another team because they didn't like this team.

Tekleab et al. 2009

Stem: To what extent do you agree with the following statements?
1. This team should not have continued to function as a team.
2. This team was not capable of working together as a unit.
3. This team probably should never work together in the future.
4. If I had the chance, I would have switched teams.
5. I would be happy to work with the team members on other projects in the future.

Tesluk & Matheiu 1999 (*incomplete*)

Social cohesion (Zaccaro 1991)

1. The people on this crew have mutual trust and respect for each other.
2. The members of this crew like to work with one another.
3. –
4. –

Satisfaction

1. I really enjoy being a part of this crew.
2. I feel like I get a lot out of being a member of this crew.
3. I get along with the members of this crew.
4. I am very happy being a part of this crew.

Intention to stay

1. During bidding for next year's winter operations, I will be looking to be on a different crew (R).
2. I want to be on a summer operations crew that has mostly the same people as this crew.
3. I would work with this crew again in the future.

DeStephen & Hirokawa (1988); Evans & Jarvis (1986)

1. This section should continue to function as a section.
2. This section is capable of working together as a unit.
3. As a team, this work group shows signs of falling apart.

Sinclair (2003)

1. I would be willing to participate in another study with this same group of individuals.
2. I feel that this group of individuals would work well together on another task.

	3. I would enjoy working with this same group of individuals on another task.
Resick et al. (2010); Cooperstein (2016)	1. I really enjoy being a part of this crew. 2. I feel like I get a lot out of being a member of this crew. 3. I wouldn't hesitate to participate on another task with the same team members. 4. If I could have left this team and worked with another team, I would have. 5. This team has what it takes to endure in future performance episodes. 6. This team has the capacity for long-term success. 7. This team should continue to function as a unit. 8. This team has positioned itself well for continued success.

Appendix B
Coding Manual

Category	Description	Variable Name
Coding Information	Coder Initials	Coder
	Date Coding Completed	Date
Study Identifying Information	Sample Identifier *[First three letters of the first author's last name followed by two digits of the publication year and two digits for each sample (e.g., For Rockwood et al 2023, sample 1 = roc2301, sample 2 = roc2302)]*	SampleID
	Short Name - First Author, Year *[e.g., Rockwood (2023) or Rockwood & Day (2023) or Rockwood et al (2023)*	ShortCite
	Full Title	Title
	Type of Report *[Code as* *1 = Journal article,* *2 = Book or book chapter,* *3 = Dissertation,* *4 = MA thesis,* *5 = Private report,* *6 = Government report (e.g., Fed, St, Country, City),* *7 = Conference paper,* *8 = Response to call for unpublished works on professional association list serves* *9 = Other]*	PubType
	Publication Status *[Code as* *0 = Unpublished,* *1 = Published,* *999 = Unsure]*	PubStat
	Peer reviewed? *[Code as* *0 = No,* *1 = Yes,* *999 = Unsure]*	PeerRev
Research Design	Study Timeframe *[Code as* *1 = Longitudinal,* *2 = Cross-sectional]*	Timeframe
	Study Design *[Code as* *1 = Observational,* *2 = Experimental]*	Design
	Study Setting *[Code as* *1 = Lab,* *2 = Field (work),* *3 = Field (school)]*	Setting
Sample Characteristics	Number of individuals in the final sample	IndN
	Number of teams in the final sample	TeamN

	[Enter NR if not reported]	
	Average team size *[Enter NR if not reported]*	SizeAve
	Team temporal stability *[Code as* *1 = Intact team,* *2 = Ad hoc team]*	Stability
	Average team tenure *[Enter digits and unit (e.g. 10 days, 3 weeks, 2 months), enter NR if not reported or if unable to calculate from information provided, enter approximate time of tenure for ad hoc teams]*	TenureAve
	Team characteristics *[Code as* *V = Virtual/partially virtual,* *R = Robot/AI team member,* *O = Other,* *NA = All human, in person team,* *NR = Not reported]*	TeamChar
	Average age of participants *[Enter NR if not reported]*	Age
	Percentage of sample that is female *[Enter NR if not reported]*	SampFem
	Racial makeup of participants *[Enter NR if not reported]*	Race
	Average educational level of participants (as reported in manuscript) *[Enter NR if not reported]*	Educ
	Type of workers in sample *[Code as* *1 = Office managers,* *2 = Office employees,* *3 = Factory or blue-collar shift work,* *4 = Students (graduate/MBA),* *5 = Students (undergrad),* *6 = Military or law enforcement,* *7 = Hospital,* *8 = Other (specify)]*	SampType
	If "Other" (8) selected, enter type of workers. *[Enter NA if "Other" not selected.]*	TypeOther
	Team task and/or occupation *[Enter 999 if unsure]*	Task
	Country of participants *[Enter 999 if unsure, enter NR if not reported]*	SampNat
	Other *[List any other details you deem relevant. If nothing to add, enter NA]*	Other
Team Viability	Definition of team viability *[If definition does not appear below, list as "Other" and specify in next column.* *1 = Aube & Rousseau, 2005,* *2 = Balkundi & Harrison 2006,* *3 = Balkundi et al. 2009,* *4 = Barrick et al 1998,* *5 = Bell & Marentette 2011,* *6 = Brown et al 2022,* *7 = de Wit et al 2012,*	TVDefinition

8 = Gelfand et al 2012, *9 = Greer et al 2018,* *10 = Guzzo & Dickinson 1996,* *11 = Hackman 1987,* *12 = Hu & Linden 2015,* *13 = Marrone et al 2007,* *14 = Rousseau & Aube 2010,* *15 =Sundstrom et al 1990,* *16 =Tekleab et al 2009,* *17 =Tesluk & Mathieu 1999,* *18 = Mixed (specify),* *19 = Other (specify)]*	
If "Mixed" or "Other" (18, 19) selected, copy definition and full citations. *[Enter NA if "Other" not selected.]*	DefnOther
Scale used *[If scale does not appear below, list as "Other" and specify in next column.* *1 = Aube & Rousseau, 2005,* *2 = Balkundi et al. 2009,* *3 = Barrick et al 1998,* *4= Bayazit & Mannix 2003,* *5 = Bushe & Coetzer 2007,* *6 = Cooperstein 2017,* *7 = Gardner & Kwan 2012,* *8 = Hackman Flight Crew Survey,* *9 = Leanna 1985,* *10 = Lehmann-Willenbrock & Chiu 2017,* *11 = Lewis 2004,* *12 = Marrone et al 2007,* *13 = Ohland et al 2012,* *14 = Rentsch & Klimoski 2011,* *15 = Resick et al 2010,* *16 = Standifer et al. 2009,* *17 = Tekleab et al 2009,* *18 = Tesluk & Mathieu 1999,* *19 = Other (specify)]*	TVScale
If "Other" (19) selected, specify scale with full citations. *[Enter NA if "Other" not selected.]*	ScaleOther
Was the scale adapted? *[Code as* *0 = No,* *1 = Yes]*	ScaleAdapt
Briefly describe adaptations made to the scale. *[Enter NA if "Other" not selected.]*	ScaleChanges
Who was team viability rated by? *[Code as* *1 = Team members,* *2 = Direct team leaders,* *3 = Raters outside the team/upper-level leaders* *4 = Behavioral observation*	TVSource
TV Mean	TVMean
TV Standard deviation	TVStanDev
Reliability estimate *[Enter NR if not reported]*	TVRel

	Reliability type *[Code as* *1 = Internal consistency (α, alpha),* *2 = Test-retest,* *3 = Parallel forms,* *4 = IRR,* *NR = not reported]*	TVRelType
	If test-retest, time period for test-retest *[Enter digits and unit (e.g. 10 days, 3 weeks, 2 months). If reliability is not test-retest, enter NA]*	RelTime
	Time point for TV measurement *[Enter T and digits for measurement time point (e.g. T1, T12). Enter NA if sample is cross-sectional or measures are at the same time point.]*	TVTimeP
Related Variables	Construct name *[Enter variable name exactly as listed in the primary study in all lower case]*	PrimConstruct
	Construct mean	PrimMean
	Construct standard deviation	PrimStanDev
	Construct code 1 *[Refer to Glossary tab in Codebook. Code as 999 if not in Glossary and add to Developmental Glossary tab in Codebook]*	Code1
	Construct code 2 *[Refer to Glossary tab in Codebook. Code as NA if no further groups listed. Code as 999 if not in Glossary and add to Developmental Glossary tab in Codebook]*	Code2
	Construct code 3 *[Refer to Glossary tab in Codebook. Code as NA if no further groups listed. Code as 999 if not in Glossary and add to Developmental Glossary tab in Codebook]*	Code3
	Construct code 4 *[Refer to Glossary tab in Codebook. Code as NA if no further groups listed. Code as 999 if not in Glossary and add to Developmental Glossary tab in Codebook]*	Code4
	Reliability estimate *[Enter NR if not reported]*	PrimRel
	Reliability type *[Code as* *1 = Internal consistency (α, alpha),* *2 = Test-retest,* *3 = Parallel forms,* *4 = IRR,* *NR = not reported]*	PrimRelType
	Reported by same source as team viability? *[Code as* *0 = No,* *1 = Yes]*	Source
	Who was PrimConstruct rated by? *[Code as* *1 = Team members,* *2 = Direct team leaders,* *3 = Raters outside the team/upper-level leaders* *4 = Behavioral observation* *5 = Objective measure,* *6 = Experimental manipulation,*	PrimSource

	7 = Other]	
	Time point for primary construct measurement *[Enter T and digits for measurement time point (e.g. T1, T12). Enter NA if study is cross-sectional or measures are at the same time point.]*	TimeP
	Time between measurements of primary construct and team viability *[Enter digits and unit (e.g. 10 days, 3 weeks, 2 months), enter NA if study is cross-sectional or measures are at the same time point.]*	TimeGap
	Timing of effect size *[Code as* *1 = Concurrent,* *2 = Predictive,* *3 = Postdictive]*	CorrTime
Effect Size	Type of Effect Size *[Code as* *1 = Correlation coefficient (r),* *2 = Standardized mean difference (d),* *3 = Odds ratio,* *4 = Raw regression coefficient (B),* *5 = Standardized regression coefficient (β),* *6 = Other (specify)]*	ESType
	If "Other" (6) selected, specify effect size type. *[Enter NA if "Other" not selected.]*	ESOther
	Effect size	ESRaw
	Effect size transformed to correlation (*r*) *[If effect size is already reported as a correlation, re-enter correlation]*	ESr
	Are effect sizes (within study) independent? *[Code as* *Y = Yes,* *N = No (why)]*	Independ
Other	Is the effect size borderline on any inclusion/exclusion criteria? *[Code as* *Y = yes,* *N = no]*	Borderline
	Additional notes/comments.	Notes

Note. NR = not reported, 999 = unsure, NA = not applicable.

Appendix C
Item-Level Agreement for Content Categorization of Scale Measures

Scale	Item	Team Satisfaction	Team Commitment	Team Capability
Aube & Rousseau (2005)				
1.	Team members adjust to the changes that happen in their work environment.	0.28	0.17	0.56
2.	When a problem occurs, the members of this team manage to solve it.	0.28	0.22	0.50
3.	The new members are easily integrated into this team.	0.39	0.28	0.33
4.	The members of this team could work a long time together.[a]	0.17	0.28	0.56
	Average agreement	0.28	0.24	0.49
Balkundi et al. (2009)				
1.	I would like to work in this unit one year from now.	0.11	0.78	0.11
2.	I have thought about changing work units since beginning to work in this unit.	0.44	0.50	0.06
	Average agreement	0.28	0.64*	0.08
Barrick et al. (1998)				
1.	This section should continue to function as a section.	0.06	0.11	0.83
2.	This section is capable of working together as a unit.	0.17	0.17	0.67
3.	This section probably should work together in the future.	0.11	0.28	0.61
4.	I believe my section approaches its task in an organized manner.	0.44	0.11	0.44
5.	My section achieves as much as I thought we would.	0.61	0.00	0.39
6.	This section accomplished what it set out to do.	0.61	0.00	0.39
7.	I believe that my personal well-being has been improved as a result of participating in this section.	0.89	0.06	0.06
8.	I feel that working with this particular section will enable me to attain my personal goals.	0.89	0.06	0.06
9.	I have learned a lot from participating in this section.	0.94	0.00	0.06
10.	I think this section has been very helpful to me.	1.00	0.00	0.00
11.	The section has influenced me in a lot of positive ways.	1.00	0.00	0.00
12.	This section has helped me to meet the personal goals I had in mind when I joined it.	1.00	0.00	0.00
	Average agreement	0.64*	0.06	0.29
Bayazit & Mannix (2003)				
1.	If I could have left this team and worked with another team, I would have.[c]	0.39	0.56	0.06
2.	I wouldn't hesitate to participate on another task with the same team members.[c]	0.22	0.78	0.00
3.	If given the choice, I would prefer to work with another team rather than this one.[c]	0.28	0.72	0.00
	Average agreement	0.30	0.69*	0.02
Bushe & Coetzer (2007)				
1.	The team's project is better than what I could have done on my own.	0.67	0.06	0.28

2.	We did an excellent job on our project.	0.72	0.00	0.28
3.	I would choose this team to work with on similar tasks in the future.	0.22	0.72	0.06
4.	Being a member of this team was a positive experience.	0.94	0.00	0.06
5.	I am satisfied with the final project of this team.	0.94	0.00	0.06
6.	Being a member of this team has been personally satisfying.	1.00	0.00	0.00
	Average agreement	0.75*	0.13	0.12

Cooperstein (2017)

1.	This team has the capacity for long-term success.	0.06	0.06	0.89
2.	This team has the resources to perform well in the future.	0.06	0.06	0.89
3.	This team can develop to meet future challenges.	0.06	0.11	0.83
4.	This team has the ability to perform well in the future.	0.06	0.11	0.83
5.	This team has positioned itself well for continued success.	0.11	0.06	0.83
6.	This team has what it takes to be effective in the future.	0.11	0.06	0.83
7.	This team is well positioned for growth over time.	0.11	0.06	0.83
8.	This team has what it takes to endure in future performance episodes.	0.06	0.17	0.78
9.	This team would work well together in the future.	0.06	0.17	0.78
10.	This team has the capacity to sustain itself.	0.11	0.11	0.78
11.	This team has the ability to function as an ongoing unit.	0.17	0.06	0.78
12.	This team should continue to function as a unit.	0.06	0.28	0.67
13.	The members of this team could work a long time together.[a]	0.17	0.28	0.56
14.	Most of the members of this team would welcome the opportunity to work as a group again in the future.[b]	0.11	0.89	0.00
	Average agreement	0.09	0.17	0.73*

Hackman (1988)—Flight Crew Survey

1.	As a team, this work group shows signs of falling apart.	0.11	0.22	0.67
2.	Every time we attempt to straighten out a member of the team, whose behavior is not acceptable, things seem to get worse rather than better.	0.44	0.06	0.50
3.	I have done much of my work on this project independently of the team.	0.33	0.28	0.39
4.	Some members in the team do not carry their fair share of the overall workload.	0.44	0.17	0.39
5.	Members of this team share responsibility for leadership.	0.39	0.28	0.33
6.	Sometimes, one of us refuses to help another team member out.	0.28	0.44	0.28
7.	Members of the team care a lot about it, and work together to make it one of the best.	0.50	0.39	0.11
8.	Working with members of the team is an energizing and uplifting experience.	0.89	0.00	0.11
9.	I am looking forward to continuing as a member of this team.	0.33	0.61	0.06
10.	There is a lot of unpleasantness among members in the team.	0.78	0.17	0.06
11.	I have learned a lot from my teammates on this project.	0.94	0.06	0.00
	Average agreement	0.49	0.24	0.26

Lehmann-Willenbrock et al. (2011)

1.	I would like to continue to work together with the other members of my team.	0.11	0.89	0.00
2.	I would like to keep working in this team for a long time.	0.22	0.78	0.00
	Average agreement	0.17	0.83*	0.00
Lewis (2004)				
1.	If we were assigned to another project, I am confident that this team would work well together.	0.06	0.22	0.72
2.	This team would perform well together in the future.	0.11	0.17	0.72
3.	If I had the choice of working on this team again, I would do it.	0.22	0.78	0.00
	Average agreement	0.13	0.39	0.48
Marrone et al. (2007)				
1.	Most team members feel like they are learning a great deal by working on this project.	0.83	0.11	0.06
2.	Team members have found being a member of this team to be a very satisfying experience.	1.00	0.00	0.00
3.	Most of the members of this team would welcome the opportunity to work as a group again in the future.[b]	0.11	0.89	0.00
	Average agreement	0.65*	0.33	0.02
Ohland et al. (2012)				
1.	If I were selecting members for a future work team, I would pick this person	0.22	0.50	0.28
2.	I would avoid working with this person in the future.	0.28	0.56	0.17
3.	I would gladly work with this individual in the future.	0.28	0.72	0.00
	Average agreement	0.26	0.59*	0.15
Rentsch & Klimoski (2011)				
1.	Team members 'carry their weight'.	0.44	0.17	0.39
2.	Members are highly committed to the team.	0.28	0.67	0.06
3.	Members look forward to team meetings.	0.72	0.28	0.00
	Average agreement	0.48	0.37	0.15
Resick et al. (2010)				
1.	I get along with the people on this team.	0.89	0.06	0.06
2.	I'm very happy that I was a member of this team.	1.00	0.00	0.00
3.	If I could have left this team and worked with another team, I would have.[c]	0.39	0.56	0.06
4.	I wouldn't hesitate to participate on another task with the same team members.[c]	0.22	0.78	0.00
5.	If given the choice, I would prefer to work with another team rather than this one.[c]	0.28	0.72	0.00
6.	I feel like I get a lot out of being a member of this crew.[d]	0.89	0.11	0.00
7.	I really enjoy being a part of this crew.[d]	1.00	0.00	0.00
	Average agreement	0.67*	0.32	0.02
Standifer et al. (2009) (*incomplete*)				
1.	This team can perform well in future projects.	0.11	0.06	0.83

2.	I would not hesitate in participating with this team on future projects.	0.11	0.89	0.00
	Average agreement	0.11	0.47	0.42
Sundstrom et al. (1990)				
1.	All team members participated in the team project.	0.44	0.11	0.44
2.	All team members were willing to contribute to the team's success.	0.33	0.28	0.39
3.	All team members did his or her share of the work.	0.44	0.22	0.33
4.	All team members pulled their own weight.	0.44	0.28	0.28
5.	Most everyone on my team would want to work together in the future.	0.06	0.83	0.11
6.	Nobody on my team wanted to switch to another team because they didn't like this team.	0.44	0.50	0.06
7.	I would like to continue working with this team.	0.22	0.78	0.00
8.	All in all, I find it a pleasure to be a member of this team.	0.94	0.06	0.00
9.	I am pleased to be a member of this team.	1.00	0.00	0.00
10.	I found it personally satisfying to be a member of my team.	1.00	0.00	0.00
	Average agreement	0.53*	0.31	0.16
Tekleab et al. (2009)				
1.	This team should not have continued to function as a team.	0.11	0.11	0.78
2.	This team probably should never work together in the future.	0.06	0.33	0.61
3.	This team was not capable of working together as a unit.	0.28	0.11	0.61
4.	I would be happy to work with the team members on other projects in the future.	0.17	0.78	0.06
5.	If I had the chance, I would have switched teams.	0.39	0.56	0.06
	Average agreement	0.20	0.38	0.42
Tesluk & Matheiu (1999)				
1.	The people on this crew have mutual trust and respect for each other.	0.44	0.44	0.11
2.	The members of this crew like to work with one another.	0.67	0.22	0.11
3.	I would work with this crew again in the future	0.17	0.78	0.06
4.	Next year, I will be looking to be on a different crew.	0.17	0.78	0.06
5.	I get along with the members of this crew.	0.83	0.11	0.06
6.	I want to be on a crew that has mostly the same people as this crew.	0.28	0.72	0.00
7.	I am very happy being a part of this crew.	1.00	0.00	0.00
8.	I feel like I get a lot out of being a member of this crew.[d]	0.89	0.11	0.00
9.	I really enjoy being a part of this crew.[d]	1.00	0.00	0.00
	Average agreement	0.60*	0.35	0.04
DeStephen & Hirokawa (1988); Evans & Jarvis (1986)				
1.	This section should continue to function as a section.	0.06	0.11	0.83
2.	This section is capable of working together as a unit.	0.17	0.17	0.67
3.	As a team, this work group shows signs of falling apart.	0.11	0.22	0.67
	Average agreement	0.11	0.17	0.72*

Sinclair (2003)			
1. I would be willing to participate in another study with this same group of individuals.[e]	0.22	0.78	0.00
2. I feel that this group of individuals would work well together on another task.[f]	0.06	0.22	0.72
3. I would enjoy working with this same group of individuals on another task.[f]	1.00	0.00	0.00
Average agreement	0.43	0.33	0.24
Resick et al. (2010); Cooperstein (2016)			
1. I really enjoy being a part of this crew.	1.00	0.00	0.00
2. I feel like I get a lot out of being a member of this crew.	0.89	0.11	0.00
3. I wouldn't hesitate to participate on another task with the same team members.	0.22	0.78	0.00
4. If I could have left this team and worked with another team, I would have.	0.39	0.56	0.06
5. This team has what it takes to endure in future performance episodes.	0.06	0.17	0.78
6. This team has the capacity for long-term success.	0.06	0.06	0.89
7. This team should continue to function as a unit.	0.06	0.28	0.67
8. This team has positioned itself well for continued success.	0.11	0.06	0.83
Average agreement	0.35	0.25	0.40

Note.

***** Values ≥ 0.50 indicating 50% or more of item ratings were in a given category.

[a] Items shared between Aubé & Rousseau (2005) and Cooperstein (2017).

[b] Items shared between Marrone et al. (2007) and Cooperstein (2017).

[c] Items shared between Bayazit & Mannix (2003) and Resick et al. (2010).

[d] Items shared between Resick et al. (2010) and Tesluk & Mathieu (1999).

[e] The Sinclair (2003) scale was identified after content coding had been completed. The item wording from Sinclair (2003) closely resembles item 2 from Bayazit & Mannix (2003), therefore coding averages from Bayazit & Mannix (2003) are used to estimate content category of Sinclair items

[f] The Sinclair (2003) scale was identified after content coding had been completed. The item wordings from Sinclair (2003) closely resembles items from Resick et al. (2010), therefore coding averages from Bayazit & Mannix (2003) are used to estimate content category of Sinclair items

Appendix D
Tests for Publication Bias and Outliers

Affective emergent states

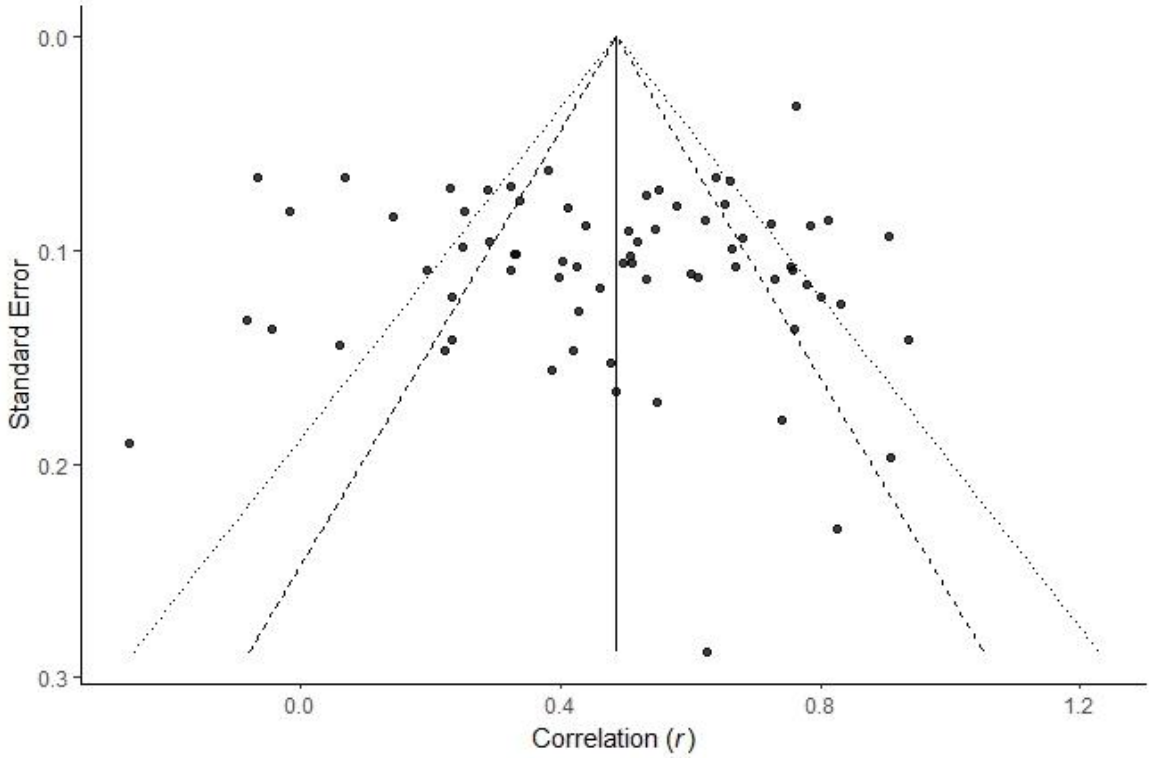


Figure D1. Funnel plot of effect sizes for the relationship between affective emergent states and team viability.

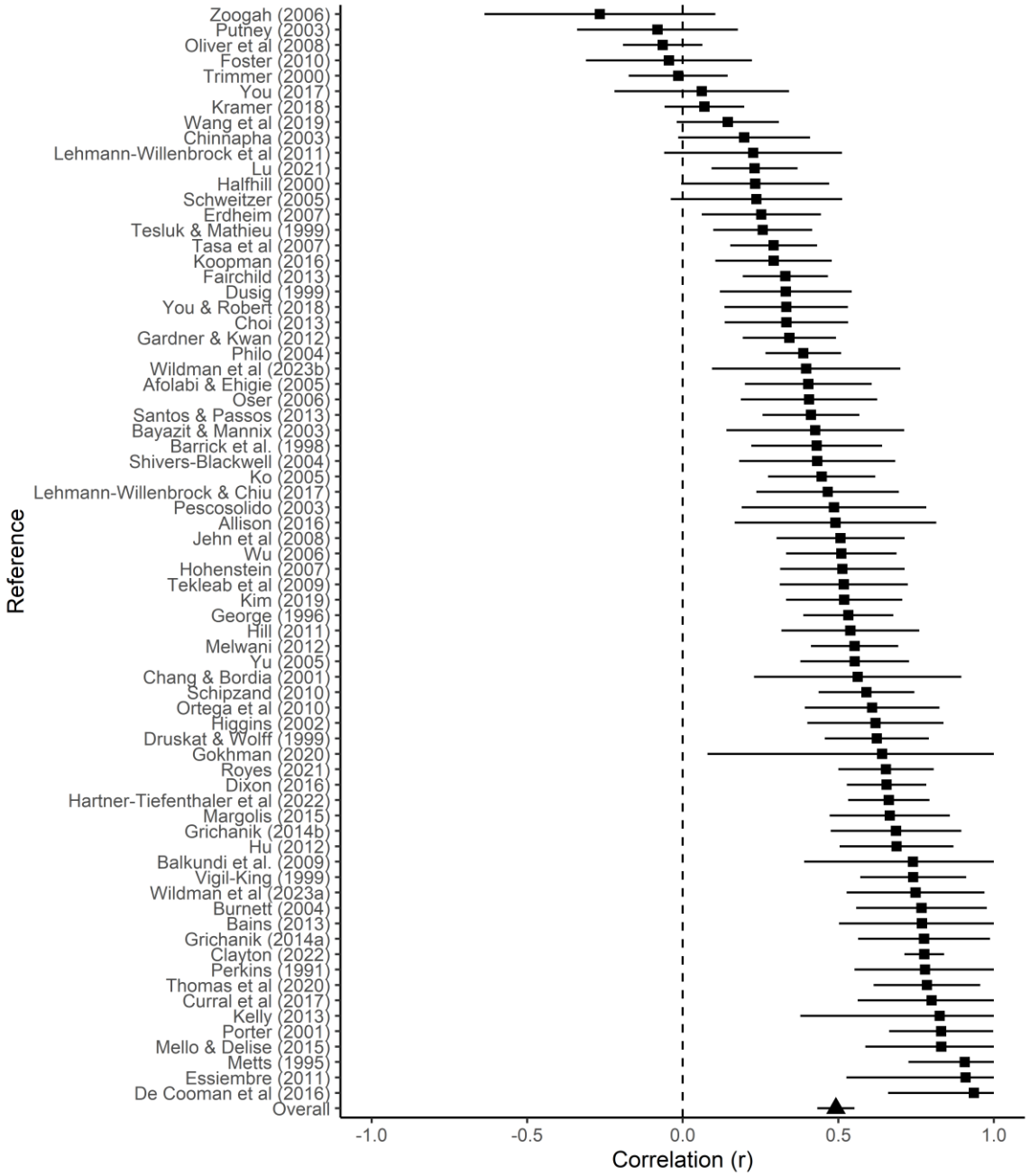


Figure D2. Forest plot of effect sizes and confidence intervals for the relationship between affective emergent states and team viability.

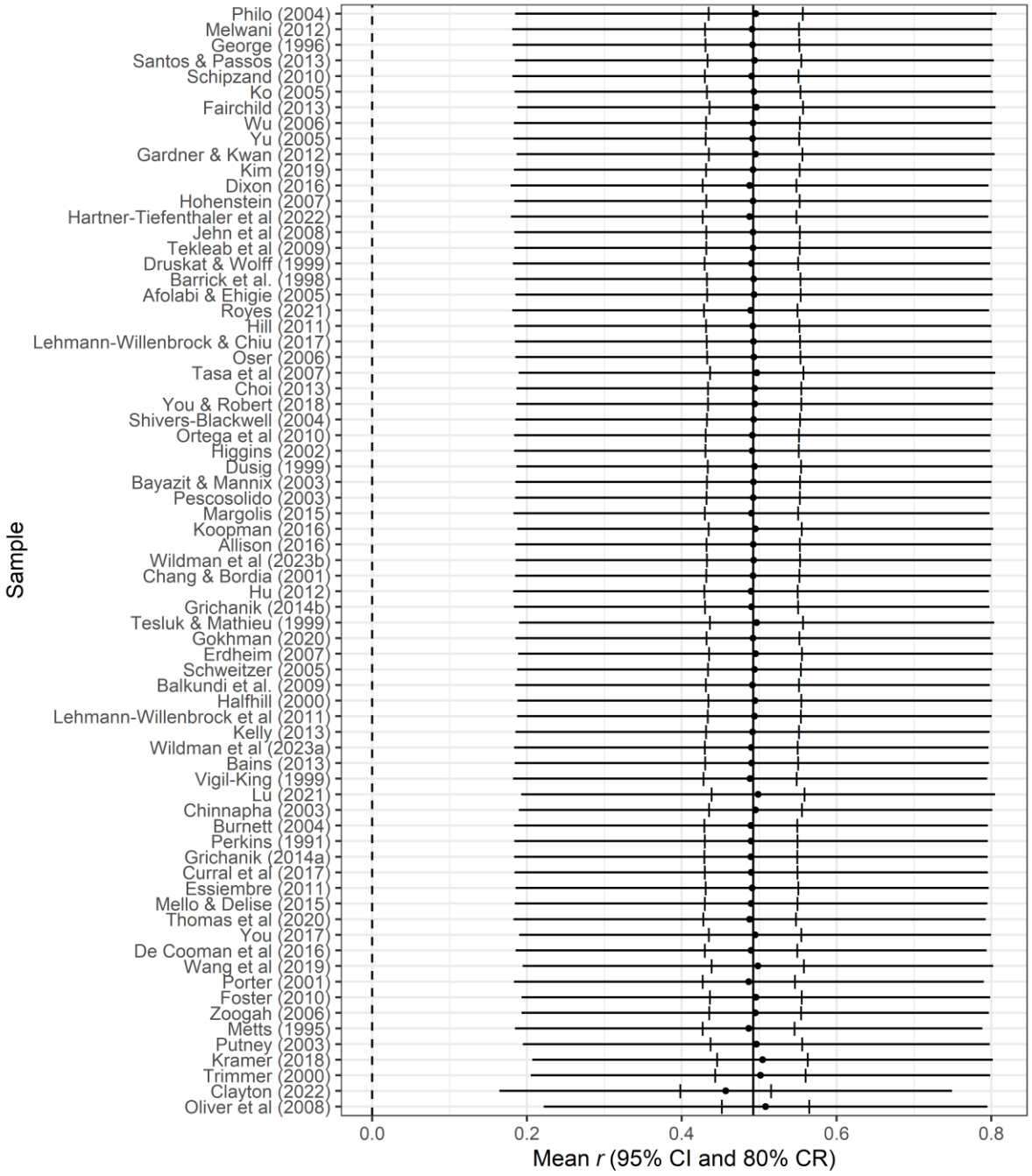


Figure D3. Leave-one-out analysis to detect influential outliers in mean effect size estimate for the relationship between affective emergent states and team viability.

Behavioral processes

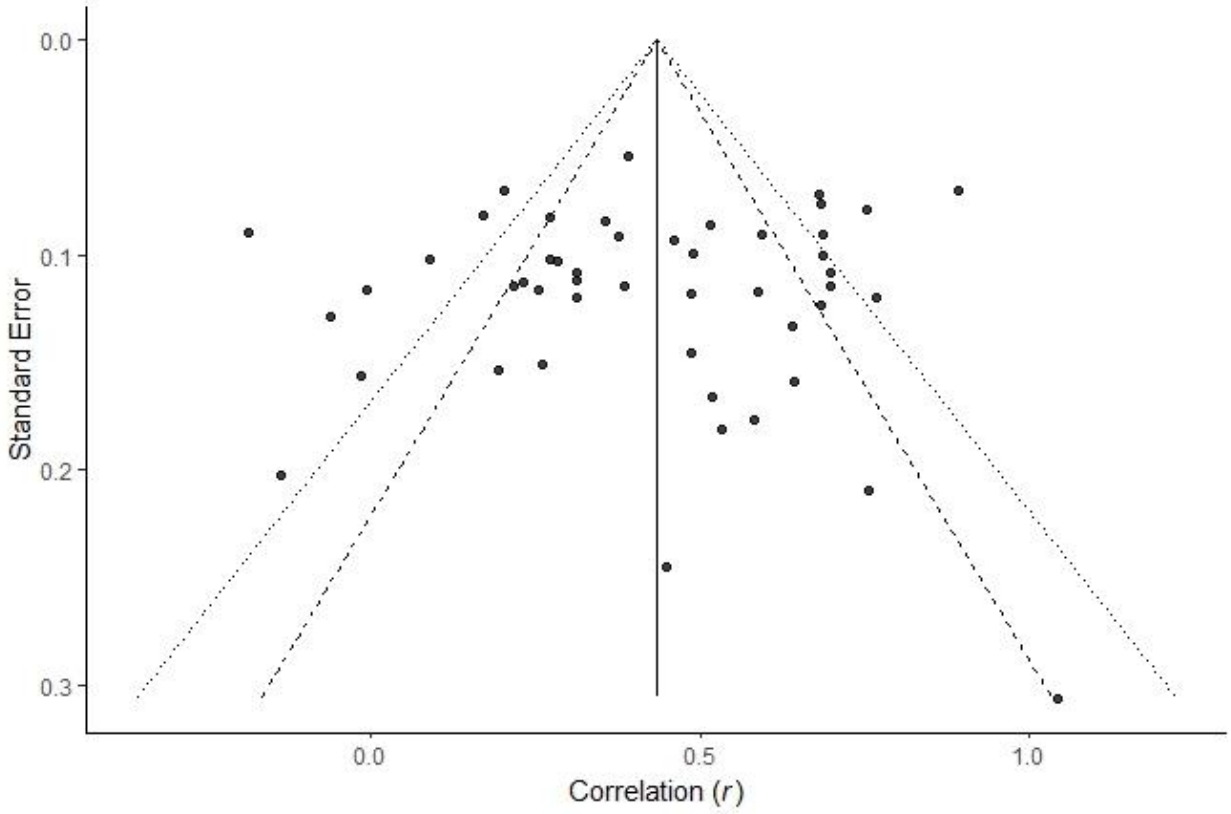


Figure D4. Funnel plot of effect sizes for the relationship between behavioral processes and team viability.

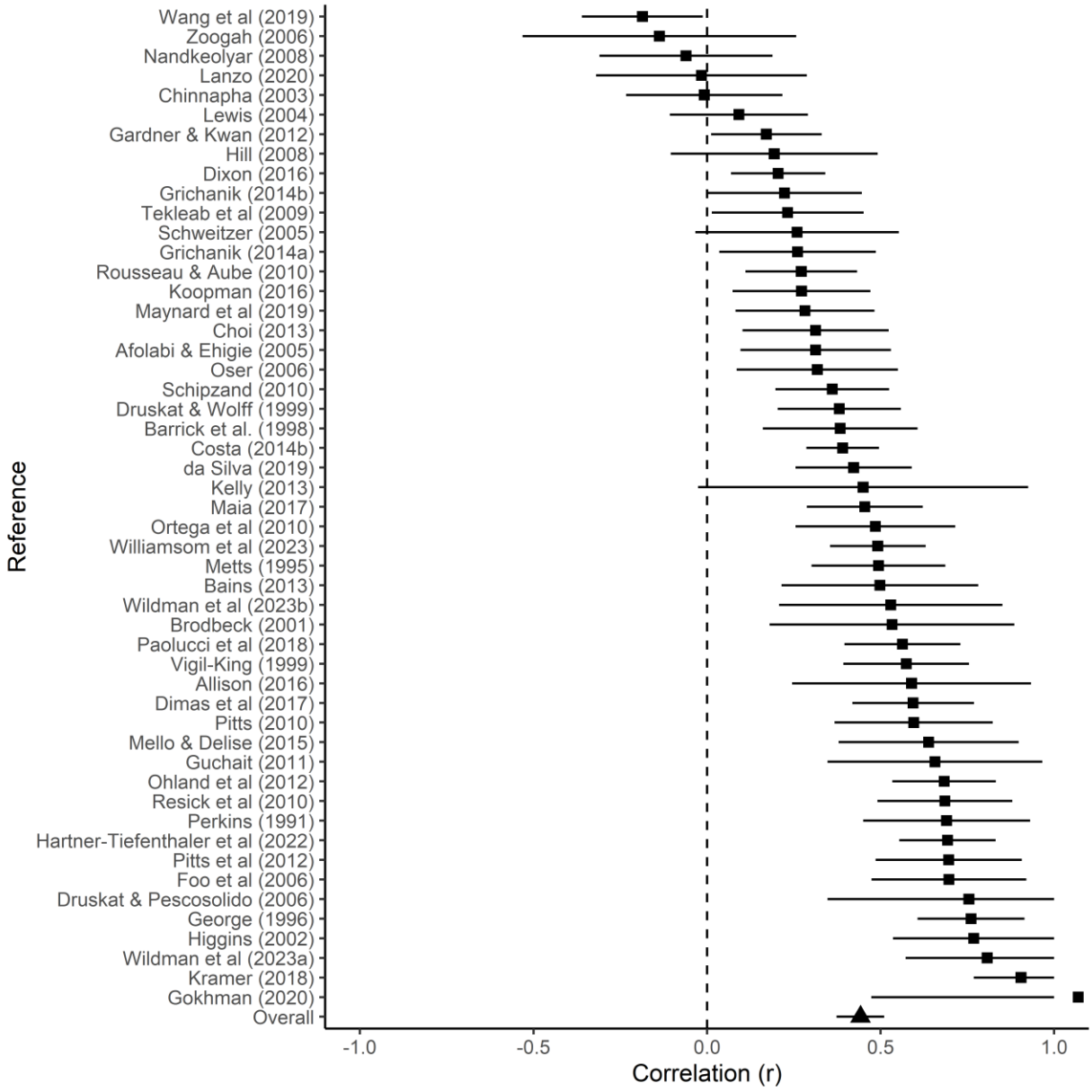


Figure D5. Forest plot of effect sizes and confidence intervals for the relationship between behavioral processes and team viability.

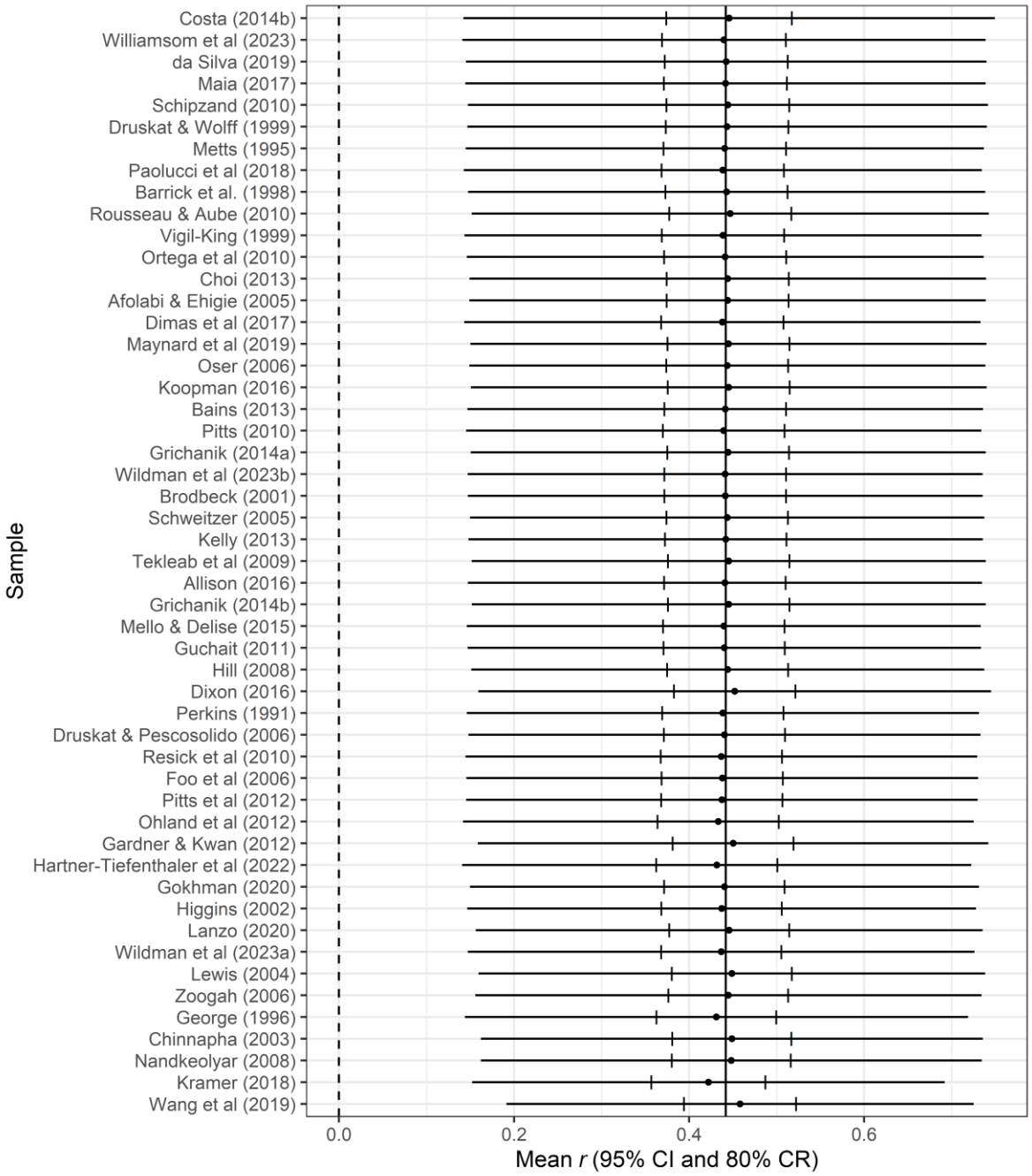


Figure D6. Leave-one-out analysis to detect influential outliers in mean effect size estimate for the relationship between behavioral processes and team viability.

Team cognition

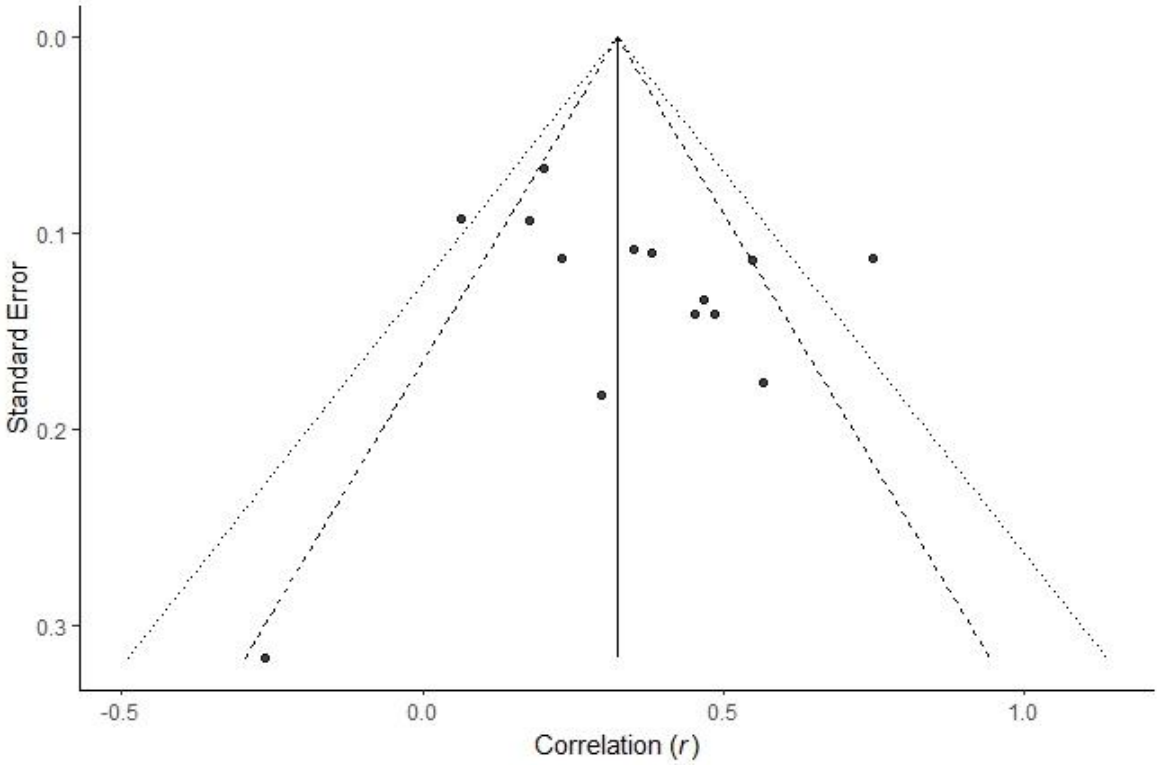


Figure D7. Funnel plot of effect sizes for the relationship between team cognition and team viability.

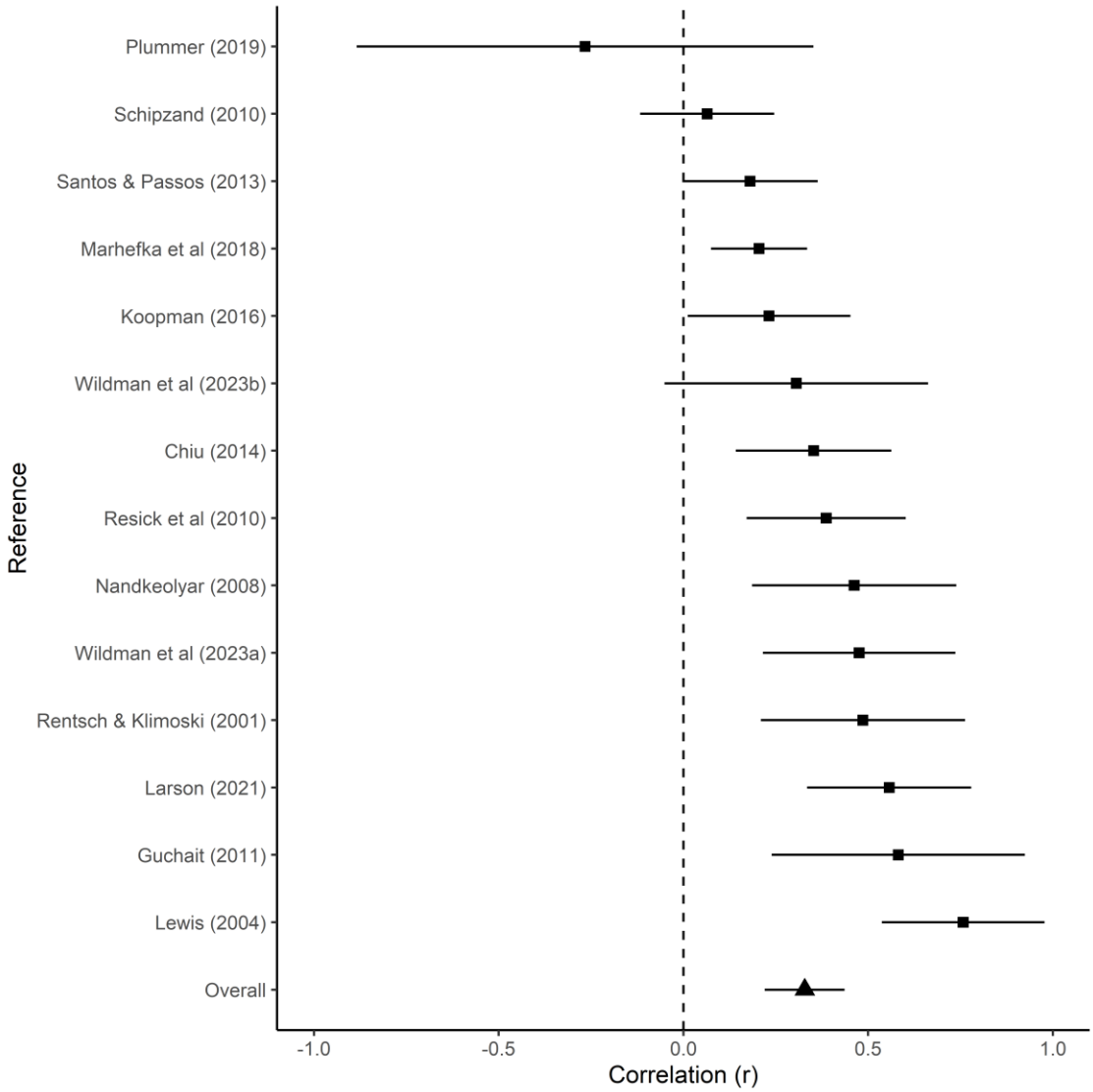


Figure D8. Forest plot of effect sizes and confidence intervals for the relationship between team cognition and team viability.

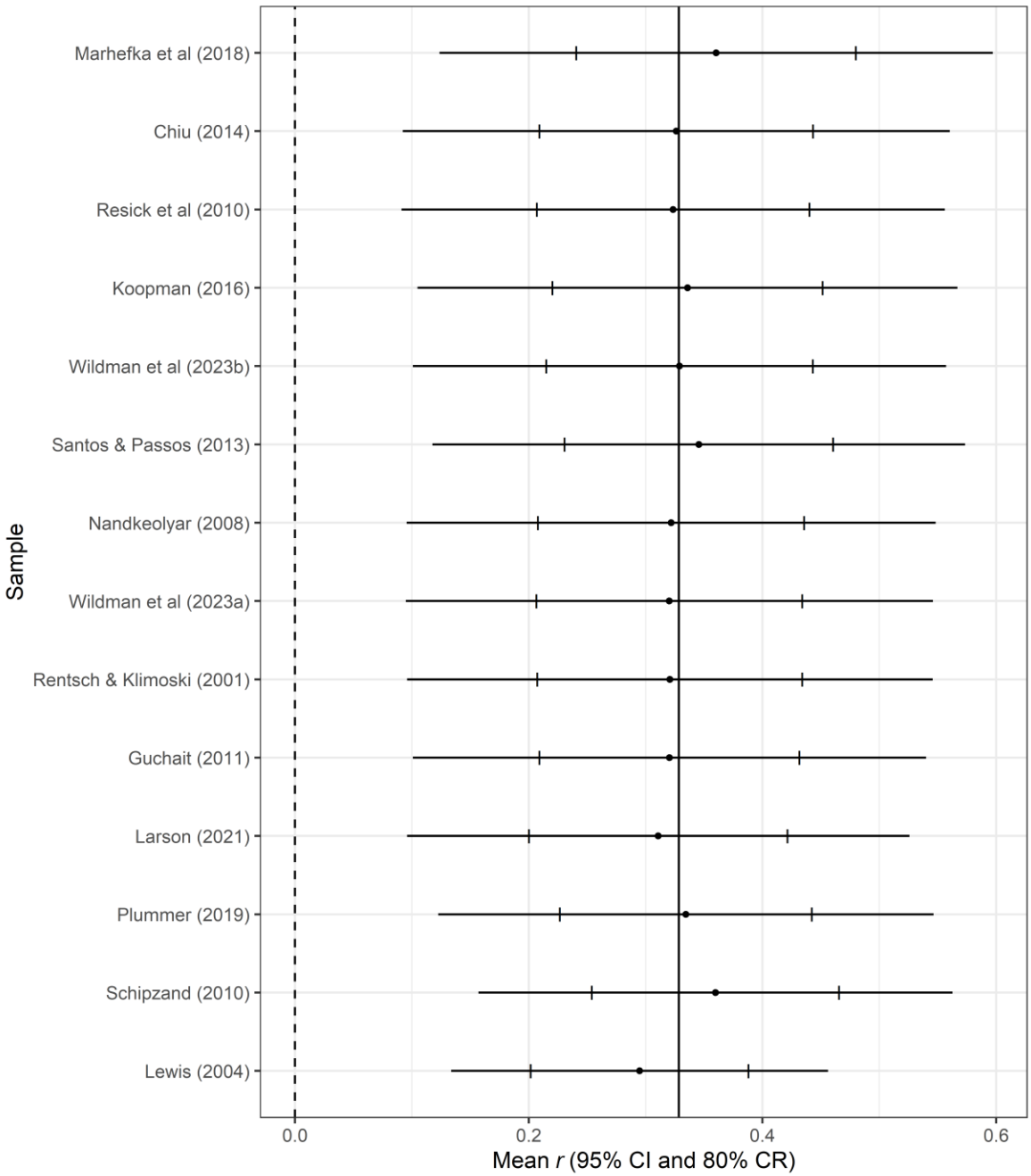


Figure D9. Leave-one-out analysis to detect influential outliers in mean effect size estimate for the relationship between team cognition and team viability.

Team performance

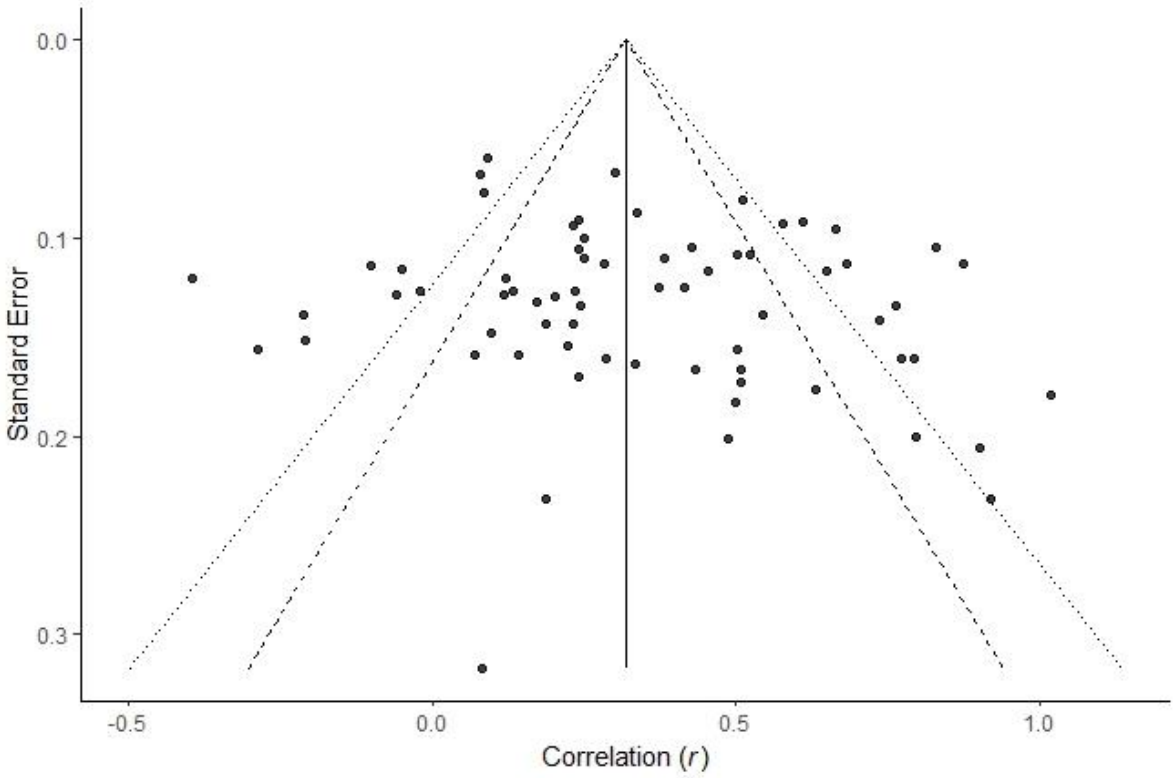


Figure D10. Funnel plot of effect sizes for the relationship between team performance and team viability.

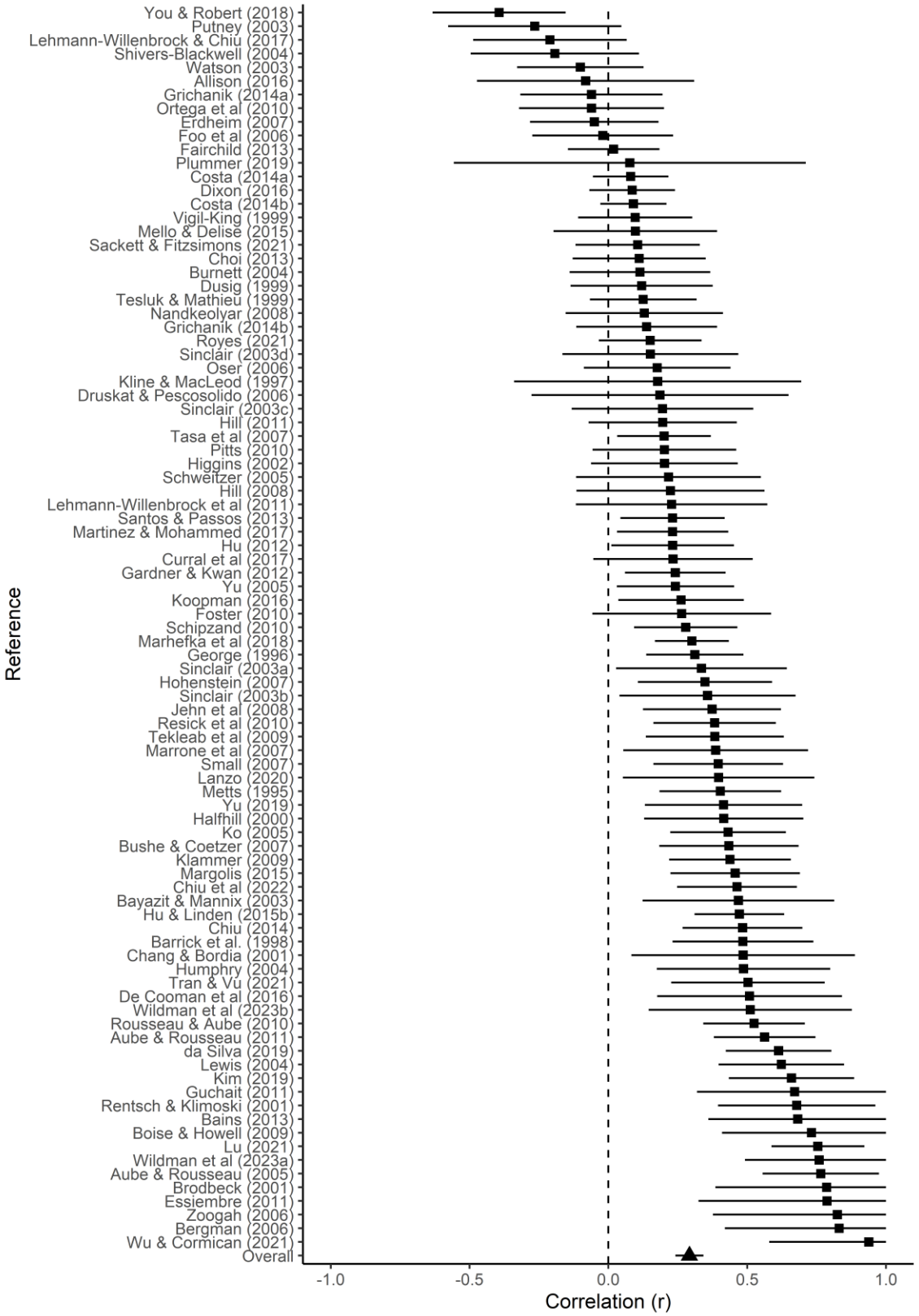


Figure D11. Forest plot of effect sizes and confidence intervals for the relationship between team performance and team viability.

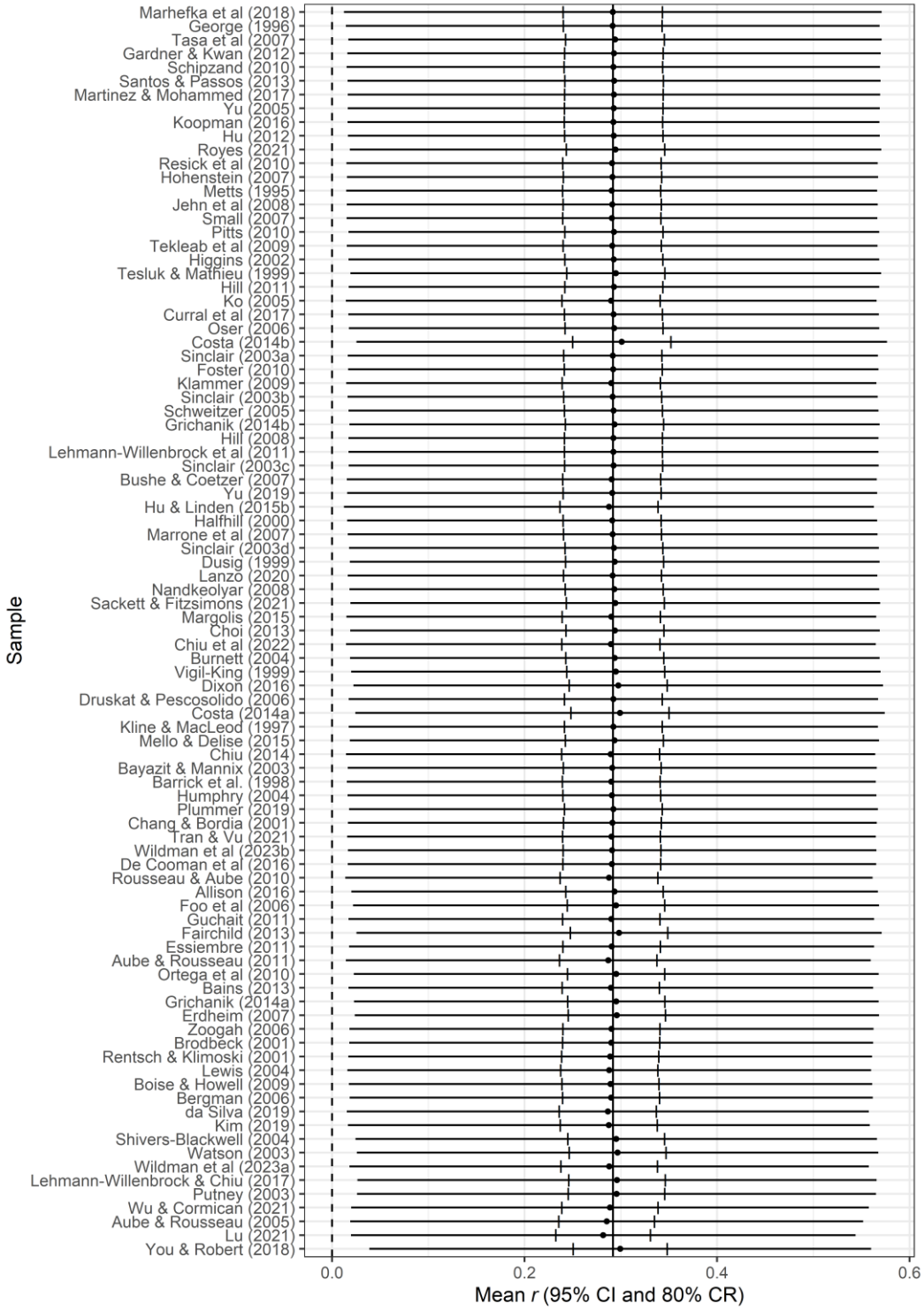


Figure D12. Leave-one-out analysis to detect influential outliers in mean effect size estimate for the relationship between team performance and team viability.

Appendix E
Meta-Analysis of Team Mediating Mechanisms Over Time

All articles coded as having multiple measurement periods were scanned for estimates of (1) affective emergent states, (2) behavioral processes, and (3) team cognition at multiple time points. Results are displayed in Table E1.

Table E1

Auto-Regressive Meta-Analytic Correlations between Team Mediating Mechanisms

						95% CI		80% Crl			
	k	***N***	***r***	**ρ**	**SD_ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I^2***
Affective emergent states	31	1,726	.40	.49	.50	.31	.68	–.15	1.00	386.10*	92.23%
Behavioral processes	8	390	.51	.63	.47	.29	.97	.03	1.00	91.51*	92.35%
Team cognition	7	499	.39	.45	.23	.26	.64	.15	.74	28.17*	78.70%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance. Estimates for affective emergent states include estimates from Mathieu et al. (2015). All other estimates are derived from studies in the present meta-analytic dataset.

Appendix F
Results for Comparisons between Overall Meta-Analytic Results

ρ_1			ρ_2				95% CI		
Variable	***k***	**ρ**	**Variable**	***k***	**ρ**	**$\rho_1 - \rho_2$**	**LL**	**UL**	
Affective emergent states	71	.59	Behavioral processes	49	.54	.05	–.06	.16	
Affective emergent states	71	.59	Team cognition	14	.39	.20	.05	.35	*
Affective emergent states	71	.59	Performance	91	.35	.24	.15	.33	*
Behavioral processes	49	.54	Team cognition	14	.39	.15	–.01	.30	
Behavioral processes	49	.54	Performance	91	.35	.19	.08	.29	*
Team cognition	14	.39	Performance	91	.35	.04	–.10	.18	
Cohesion	25	.78	Potency	8	.57	.21	–.09	.51	
Cohesion	25	.78	Psychological safety	9	.92	–.14	–.28	.04	
Cohesion	25	.78	Efficacy	12	.61	.17	0	.35	
Cohesion	25	.78	Empowerment	6	.46	.32	–.08	.72	
Cohesion	25	.78	Identification	4	.17	.61	.25	.97	*
Cohesion	25	.78	Conflict states	5	–.28	–.50	–1.52	–.34	*
Task cohesion	9	.64	Social cohesion	10	.55	.09	–.14	.32	
Potency	8	.57	Psychological safety	9	.92	–.35	–.63	–.04	*
Potency	8	.57	Efficacy	12	.61	–.04	–.34	.27	
Potency	8	.57	Empowerment	6	.46	.11	–.36	.58	
Potency	8	.57	Identification	4	.17	.40	–.03	.84	
Potency	8	.57	Conflict states	5	–.28	–.29	–1.34	.01	
Psychological safety	9	.92	Efficacy	12	.61	.31	.12	.47	*
Psychological safety	9	.92	Empowerment	6	.46	.46	.06	.85	*
Psychological safety	9	.92	Identification	4	.17	.75	.38	1.10	*
Psychological safety	9	.92	Conflict states	5	–.28	–.64	–1.65	–.46	*
Efficacy	12	.61	Empowerment	6	.46	.15	–.25	.55	
Efficacy	12	.61	Identification	4	.17	.44	.07	.80	*
Efficacy	12	.61	Conflict states	5	–.28	–.33	–1.35	–.15	*
Empowerment	6	.46	Identification	4	.17	.29	–.22	.80	
Empowerment	6	.46	Conflict states	5	–.28	–.18	–1.26	.22	

Identification	4	.17	Conflict states	5	–.28	.11	–.96	.47	
Relationship conflict	22	–.60	Task conflict	17	–.29	–.31	–.54	–.09	*
Relationship conflict	22	–.60	Process conflict	6	–.59	–.01	–.17	.15	
Task conflict	17	–.29	Process conflict	6	–.59	.30	.07	.53	*
Action processes	15	.61	Transition processes	5	.72	–.11	–.34	.12	
Action processes	15	.61	Interpersonal processes	14	.53	.08	–.13	.30	
Action processes	15	.61	Communication	25	.53	.08	–.13	.30	
Action processes	15	.61	Learning processes	5	.56	.05	–.26	.36	
Transition processes	5	.72	Interpersonal processes	14	.53	.19	–.02	.42	
Transition processes	5	.72	Communication	25	.53	.19	–.03	.42	
Transition processes	5	.72	Learning processes	5	.56	.16	–.15	.47	
Interpersonal processes	14	.53	Communication	25	.53	0	–.21	.21	
Interpersonal processes	14	.53	Learning processes	5	.56	–.03	–.34	.27	
Communication	25	.53	Learning processes	5	.56	–.03	–.34	.27	
Transactive memory systems	7	.58	Shared mental models	9	.32	.26	.02	.49	*
Creativity/Innovation	7	.21	Unspecified performance	87	.35	–.14	–.34	.06	
Subjective performance	68	.45	Objective performance	31	.18	.27	.16	.38	*

Note. Asterisks identify modified confidence intervals that exclude zero identifying subgroup comparisons that are meaningfully different from one another.

Appendix G
Results for Comparisons between Temporal Measurements

ρ_1			ρ_2				95% CI		
Measurement time	***k***	**ρ**	**Measurement time**	***k***	**ρ**	**$\rho_1 - \rho_2$**	**LL**	**UL**	
Affective emergent states									
Contemporaneous measurement	58	.61	Viability measured as an input	12	.53	.08	–.09	.25	
Contemporaneous measurement	58	.61	Viability measured as an outcome	26	.54	.07	–.05	.20	
Viability measured as an outcome	26	.54	Viability measured as an input	12	.53	.01	–.16	.18	
Behavioral processes									
Contemporaneous measurement	40	.58	Viability measured as an input	10	.41	.17	–.02	.35	
Contemporaneous measurement	40	.58	Viability measured as an outcome	17	.38	.20	.03	.37	*
Viability measured as an outcome	17	.38	Viability measured as an input	10	.41	–.03	–.25	.18	
Team cognition									
Contemporaneous measurement	10	.51	Viability measured as an outcome	10	.33	.18	–.02	.38	
Performance									
Contemporaneous measurement	86	.37	Viability measured as an input	13	.18	.19	.04	.35	*
Contemporaneous measurement	86	.37	Viability measured as an outcome	12	.27	.10	–.10	.29	
Viability measured as an outcome	12	.27	Viability measured as an input	13	.18	.09	–.14	.33	

Note. Asterisks identify modified confidence intervals that exclude zero identifying subgroup comparisons that are meaningfully different from one another.

Appendix H
Results for Comparisons between Moderator Levels

Table F1

Comparisons between Moderator Levels for Team Viability Measure Content

	Moderator Level 1	Moderator Level 2	$\rho_1 - \rho_2$	95% CI LL	95% CI UL	
Affective emergent states	Commitment	Satisfaction	.21	.00	.43	
	Commitment	Capability & commitment	.20	–.06	.45	
	Commitment	Mix of all 3	.23	.03	.43	*
	Commitment	Indeterminate	.29	.06	.52	*
	Satisfaction	Capability & commitment	–.01	–.26	.23	
	Satisfaction	Mix of all 3	.02	–.17	.20	
	Satisfaction	Indeterminate	.08	–.15	.29	
	Capability & commitment	Mix of all 3	.03	–.19	.26	
	Capability & commitment	Indeterminate	.09	–.16	.35	
	Mix of all 3	Indeterminate	.06	–.15	.26	
Behavioral processes	Satisfaction	Capability & commitment	.30	.01	.59	*
	Satisfaction	Mix of all 3	.31	.10	.52	*
	Satisfaction	Indeterminate	.43	.22	.65	*
	Capability & commitment	Mix of all 3	.01	–.26	.28	
	Capability & commitment	Indeterminate	.13	–.15	.41	
	Mix of all 3	Indeterminate	.12	–.07	.32	
Performance	Commitment	Satisfaction	–.12	–.37	.14	
	Commitment	Capability & commitment	.13	–.16	.42	
	Commitment	Mix of all 3	–.22	–.48	.04	
	Commitment	Indeterminate	–.06	–.33	.21	
	Satisfaction	Capability & commitment	.25	.06	.44	*
	Satisfaction	Mix of all 3	–.10	–.23	.03	
	Satisfaction	Capability	.25	–.55	1.00	
	Capability & commitment	Mix of all 3	–.35	–.55	–.15	*

Capability & commitment	Indeterminate	–.19	–.40	.02
Mix of all 3	Indeterminate	.16	.00	.32

Note. Asterisks identify modified confidence intervals that exclude zero identifying subgroup comparisons that are meaningfully different from one another.

Table F2

Comparisons between Moderator Levels for Team Viability Measure Referent

				95% CI		
	Moderator Level 1	**Moderator Level 2**	**$\rho_1 - \rho_2$**	**LL**	**UL**	
Affective emergent states	Direct consensus	Referent shift	.40	.12	.68	*
	Direct consensus	Mixed	.18	.01	.35	*
	Direct consensus	Indeterminate	.18	–.03	.39	
	Referent shift	Mixed	–.22	–.48	.04	
	Referent shift	Indeterminate	–.22	–.50	.06	
	Mixed	Indeterminate	.00	–.17	.18	
Behavioral processes	Direct consensus	Referent shift	.07	–.28	.42	
	Direct consensus	Mixed	.08	–.23	.39	
	Direct consensus	Indeterminate	.29	–.03	.62	
	Referent shift	Mixed	.01	–.22	.23	
	Referent shift	Indeterminate	.22	–.02	.46	
	Mixed	Indeterminate	.21	.03	.40	*
Performance	Direct consensus	Referent shift	–.39	–.57	–.21	*
	Direct consensus	Mixed	–.03	–.18	.12	
	Direct consensus	Indeterminate	–.03	–.21	.15	
	Referent shift	Mixed	.36	.22	.50	*
	Referent shift	Indeterminate	.36	.19	.53	*
	Mixed	Indeterminate	.00	–.14	.14	

Note. Asterisks identify modified confidence intervals that exclude zero identifying subgroup comparisons that are meaningfully different from one another.

Table F3

Comparisons between Moderator Levels for Team Viability Measure Source

				95% CI		
	Moderator Level 1	**Moderator Level 2**	**$\rho_1 - \rho_2$**	**LL**	**UL**	
Affective emergent states	Team members	Direct team leaders	.42	.29	.55	*
Behavioral processes	Team members	Direct team leaders	.25	–.03	.53	
Performance	Team members	Direct team leaders	–.32	–.48	–.16	*

Note. Asterisks identify modified confidence intervals that exclude zero identifying subgroup comparisons that are meaningfully different from one another.

Appendix I
Hierarchical Moderator Analyses

Table I1

Partial Hierarchical Moderator Analyses for the Affective Emergent States-Viability Relationship

							95% CI		80% CrI			
		k	***N***	***r***	**ρ**	**$SD_ρ$**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Affective emergent states		71	4,868	.49	.59	.28	.52	.66	.23	.95	475.53*	85.28%
Content	**Referent**	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	3	187	.37	.44	.34	.03	.85	.01	.87	14.27*	85.99%
Capability	Mixed	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	9	912	.66	.79	.23	.63	.95	.49	1.00	64.86*	87.67%
Commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	13	985	.47	.56	.25	.41	.71	.24	.88	68.29*	82.43%
Satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	6	435	.50	.59	.22	.40	.79	.31	.87	23.31*	78.55%
Capability & commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	—	—	—	—	—	—	—	—	—	—	—

Commitment & satisfaction	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	3	251	.53	.63	.23	.35	.91	.34	.92	11.43*	82.51%
Mix of all 3	Referent shift	3	202	.35	.42	.16	.19	.65	.22	.62	4.74	57.78%
Mix of all 3	Mixed	14	648	.48	.58	.28	.42	.74	.22	.93	61.49*	78.86%
Mix of all 3	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	19	1,127	.48	.57	.30	.42	.72	.18	.96	120.56*	85.07%
Content	**Source**											
Capability	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct team leaders	2	74	.09	.11	.18	–.26	.47	–.12	.33	1.79	44.12%
Capability	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Team members	9	912	.66	.79	.23	.63	.95	.49	1.00	64.86*	87.67%
Commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Team members	13	994	.48	.58	.25	.43	.73	.25	.90	72.86*	83.53%
Satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Team members	6	435	.50	.59	.22	.40	.79	.31	.87	23.31*	78.55%
Capability & commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Commitment & satisfaction	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Team members	17	870	.55	.66	.17	.56	.76	.44	.88	45.45*	64.80%
Mix of all 3	Direct team leaders	3	231	.16	.19	.00	.04	.35	.19	.19	1.99	0%
Mix of all 3	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	16	1,033	.49	.59	.33	.42	.76	.17	1.00	126.61*	88.15%
Indeterminate	Direct team leaders	2	100	.19	.22	.00	.20	.25	.22	.22	.01	0%
Indeterminate	Raters outside team	2	92	.21	.25	.34	–.28	.77	–.19	.68	4.82*	79.27%
Referent	**Source**											
Direct consensus	Team members	12	1163	.63	.75	.23	.61	.89	.46	1.00	82.33*	86.64%
Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Team members	5	395	.35	.42	.39	.06	.77	–.08	.91	43.60*	90.83%
Referent shift	Direct team leaders	3	190	.18	.21	.09	.01	.41	.09	.33	2.82	29.03%
Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mixed	Team members	30	1,902	.50	.60	.23	.51	.70	.31	.89	130.62*	77.80%
Mixed	Direct team leaders	3	166	.20	.23	.2	–.05	.52	–.02	.49	5.11	60.85%
Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	15	897	.58	.69	.22	.57	.81	.41	.97	63.70*	78.02%
Indeterminate	Direct team leaders	2	100	.19	.22	.00	.20	.25	.22	.22	.01	0%

Indeterminate	Raters outside team	2	92	.21	.25	.34	–.28	.77	–.19	.68	4.82*	79.27%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance.

Table I2

Full Hierarchical Moderator Analyses for the Affective Emergent States-Viability Relationship

								95% CI		80% CrI			
Content	**Referent**	**Source**	***k***	***N***	***r***	**ρ**	**SD_ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Affective emergent states			71	4,868	.49	.59	.28	.52	.66	.23	.95	475.53*	85.28%
Capability	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Direct team leaders	2	74	.09	.11	.18	–.26	.47	–.12	.33	1.79	44.12%
Capability	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Team members	9	912	.66	.79	.23	.63	.95	.49	1.00	64.86*	87.67%
Commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—

Satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Team members	12	934	.47	.57	.26	.41	.72	.23	.90	68.23*	83.88%
Satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Team members	6	435	.50	.59	.22	.40	.79	.31	.87	23.31*	78.55%
Capability & commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Commitment & satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Team members	3	251	.53	.63	.23	.35	.91	.34	.92	11.43*	82.51%
Mix of all 3	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Team members	2	86	.51	.61	.00	.58	.64	.61	.61	0.02	0%
Mix of all 3	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Team members	12	533	.57	.68	.19	.55	.81	.43	.92	33.80*	67.45%
Mix of all 3	Mixed	Direct team leaders	2	115	.09	.11	.00	–.09	.31	.11	.11	0.82	0%
Mix of all 3	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—

Indeterminate	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Team members	15	897	.58	.69	.22	.57	.81	.41	.97	63.70*	78.02%
Indeterminate	Indeterminate	Direct team leaders	2	100	.19	.22	.00	.2	.25	.22	.22	.01	0%
Indeterminate	Indeterminate	Raters outside team	2	92	.21	.25	.34	–.28	.77	–.19	.68	4.82*	79.27%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance.

Table I3

Partial Hierarchical Moderator Analyses for the Behavioral Processes-Viability Relationship

							95% CI		80% CrI			
		k	***N***	***r***	**ρ**	**$SD_ρ$**	**LL**	**UL**	**LL**	**UL**	***Q***	I^2
Behavioral processes		49	3,109	.44	.54	.28	.45	.63	.17	.90	273.00*	82.42%
Content	**Referent**	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	11	655	.65	.79	.27	.62	.96	.44	1.00	70.64*	85.84%
Satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	5	569	.40	.48	.25	.24	.72	.16	.81	27.82*	85.62%
Capability & commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—

Mix of all 3	Direct consensus	2	101	.24	.30	.00	.25	.34	.30	.30	.04	0%
Mix of all 3	Referent shift	4	291	.46	.57	.15	.37	.76	.37	.76	7.89	61.98%
Mix of all 3	Mixed	15	800	.37	.45	.31	.27	.63	.05	.85	75.03*	81.34%
Mix of all 3	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	10	513	.28	.35	.16	.20	.49	.14	.55	18.24*	50.66%
Content	**Source**											
Capability	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Team members	11	671	.67	.82	.25	.66	.98	.49	1.00	65.92*	84.83%
Satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Team members	4	505	.43	.53	.23	.28	.78	.23	.83	20.20*	85.15%
Capability & commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Team members	17	840	.41	.51	.21	.38	.63	.23	.78	48.10*	66.74%
Mix of all 3	Direct team leaders	4	352	.30	.37	.40	–.04	.78	–.15	.89	35.56*	91.56%
Mix of all 3	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	7	383	.34	.41	.11	.27	.55	.27	.56	9.34	35.77%
Indeterminate	Direct team leaders	2	113	.15	.19	.19	–.16	.53	–.06	.43	2.40	58.38%

Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Referent	**Source**										
Direct consensus	Team members	4	281	.52	.64	.28	.35	.93	.29	.99	19.78*	84.83%
Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Direct team leaders	3	269	.45	.55	.18	.32	.79	.33	.78	7.12*	71.91%
Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mixed	Team members	28	1826	.51	.62	.27	.52	.73	.28	.96	154.41*	82.51%
Mixed	Direct team leaders	2	134	.03	.04	.45	–.62	.7	–.54	.62	10.11*	90.11%
Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	7	383	.34	.41	.11	.27	.55	.27	.56	9.34	35.77%
Indeterminate	Direct team leaders	2	113	.15	.19	.19	–.16	.53	–.06	.43	2.40	58.38%
Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance.

Table I4

Full Hierarchical Moderator Analyses for the Behavioral Processes-Viability Relationship

								95% CI		80% CrI			
Content	**Referent**	**Source**	***k***	***N***	***r***	**ρ**	**SD_ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Behavioral processes			49	3,109	.44	.54	.28	.45	.63	.17	.90	273.00*	82.42%
Capability	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Team members	10	604	.67	.82	.27	.64	.99	.47	1.00	65.80*	86.32%
Satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—

Satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Team members	4	505	.43	.53	.23	.28	.78	.23	.83	20.20*	85.15%
Capability & commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Commitment & satisfaction	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Team members	2	101	.24	.30	.00	.25	.34	.30	.30	.04	0%
Mix of all 3	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Direct team leaders	3	269	.45	.55	.18	.32	.79	.33	.78	7.12*	71.91%
Mix of all 3	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Team members	14	717	.43	.53	.23	.39	.67	.24	.82	44.03*	70.47%
Mix of all 3	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Team members	7	383	.34	.41	.11	.27	.55	.27	.56	9.34	35.77%
Indeterminate	Indeterminate	Direct team leaders	2	113	.15	.19	.19	–.16	.53	–.06	.43	2.40	58.38%
Indeterminate	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI =

confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, *Q* = Cochran's *Q*, I^2 = percent of total variance attributed to between-studies variance.

Table I5

Partial Hierarchical Moderator Analyses for the Team Cognition-Viability Relationship

							95% CI		80% CrI			
		k	***N***	***r***	**ρ**	**SD_ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Team cognition		14	885	.33	.39	.20	.26	.52	.13	.66	41.17*	68.43%
Content	**Referent**	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	2	130	.47	.56	.08	.36	.76	.47	.66	1.38	27.59%
Satisfaction	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	2	111	.40	.48	.00	.33	.63	.48	.48	.61	0%
Commitment & satisfaction	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—

Mix of all 3	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	7	461	.23	.27	.13	.13	.41	.11	.43	10.59	43.33%
Mix of all 3	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Content	**Source**											
Capability	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Team members	2	130	.47	.56	.08	.36	.76	.47	.66	1.38	27.59%
Satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Team members	7	461	.23	.27	.13	.13	.41	.11	.43	10.59	43.33%
Mix of all 3	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—

Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Referent	**Source**										
Direct consensus	Team members	3	222	.35	.42	.19	.16	.68	.17	.67	6.61*	69.73%
Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mixed	Team members	7	461	.23	.27	.13	.13	.41	.11	.43	10.59	43.33%
Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance.

Table I6

Full Hierarchical Moderator Analyses for the Team Cognition-Viability Relationship

								95% CI		80% CrI			
Content	**Referent**	**Source**	***k***	***N***	***r***	**ρ**	**SD_ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I^2***
Team cognition			14	885	.33	.39	.20	.26	.52	.13	.66	41.17*	68.43%
Capability	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Team members	2	130	.47	.56	.08	.36	.76	.47	.66	1.38	27.59%
Satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—

Satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Commitment & satisfaction	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Team members	7	461	.23	.27	.13	.13	.41	.11	.43	10.59	43.33%
Mix of all 3	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI =

confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, *Q* = Cochran's *Q*, I^2 = percent of total variance attributed to between-studies variance.

Table I7

Partial Hierarchical Moderator Analyses for the Team Performance-Viability Relationship

							95% CI		80% CrI			
		k	*N*	*r*	ρ	SD_ρ	LL	UL	LL	UL	*Q*	I^2
Performance		91	5,353	.29	.35	.25	.29	.41	.02	.67	366.97*	75.47%
Content	**Referent**	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	2	74	.10	.12	.53	–.67	.91	–.56	.81	8.46*	88.17%
Capability	Mixed	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	5	247	.21	.25	.22	.01	.49	–.04	.53	11.21*	64.33%
Commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	4	201	.44	.52	.00	.48	.56	.52	.52	.24	0%
Satisfaction	Mixed	16	993	.28	.33	.17	.22	.43	.11	.54	35.80*	58.11%
Satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	9	837	.10	.12	.23	–.05	.29	–.18	.42	36.94*	78.34%
Capability & commitment	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	2	111	.56	.66	.11	.44	.88	.52	.80	1.85	46.00%
Commitment & satisfaction	Mixed	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	—	—	—	—	—	—	—	—	—	—	—

Mix of all 3	Direct consensus	6	233	.17	.20	.00	.05	.35	.20	.20	4.98	0%
Mix of all 3	Referent shift	9	629	.62	.74	.20	.60	.88	.49	.99	42.20*	81.04%
Mix of all 3	Mixed	16	943	.30	.36	.15	.26	.46	.16	.55	31.70*	52.67%
Mix of all 3	Indeterminate	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	2	80	.50	.60	.28	.16	1.00	.24	.96	4.74	78.91%
Indeterminate	Mixed	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	20	1,013	.24	.28	.22	.16	.40	.00	.57	55.74*	65.91%
Content	**Source**											
Capability	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct team leaders	2	74	.10	.12	.53	–.67	.91	–.56	.81	8.46*	88.17%
Capability	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Team members	5	247	.21	.25	.22	.01	.49	–.04	.53	11.21*	64.33%
Commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Team members	18	1,099	.29	.34	.15	.24	.44	.14	.54	37.07*	54.14%
Satisfaction	Direct team leaders	3	162	.46	.54	.00	.50	.59	.54	.54	.17	0%
Satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Team members	8	773	.06	.07	.15	–.06	.21	–.12	.26	17.88*	60.85%
Capability & commitment	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Team members	24	1,175	.29	.35	.21	.24	.45	.07	.62	64.75*	64.48%
Mix of all 3	Direct team leaders	6	506	.62	.74	.15	.60	.87	.55	.93	19.11*	73.84%
Mix of all 3	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	20	1,001	.24	.28	.22	.16	.40	.00	.56	54.60*	65.20%
Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—

Indeterminate	Raters outside team	2	92	.54	.64	.19	.32	.96	.40	.88	3.09	67.62%
Referent	**Source**										
Direct consensus	Team members	12	547	.21	.25	.15	.12	.38	.06	.44	19.03	42.18%
Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Referent shift	Team members	9	366	.53	.63	.25	.44	.81	.31	.94	32.73*	75.56%
Referent shift	Direct team leaders	10	729	.54	.64	.25	.48	.81	.33	.96	60.07*	85.02%
Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mixed	Team members	37	2,502	.21	.24	.19	.17	.32	.00	.48	99.60*	63.86%
Mixed	Direct team leaders	2	83	.40	.47	.09	.22	.72	.36	.58	1.29	22.57%
Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Team members	18	921	.21	.25	.20	.13	.37	–.01	.51	43.83*	61.21%
Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Raters outside team	2	92	.54	.64	.19	.32	.96	.40	.88	3.09	67.62%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance.

Table I8

Full Hierarchical Moderator Analyses for the Team Performance-Viability Relationship

								95% CI		80% CrI			
Content	**Referent**	**Source**	***k***	***N***	***r***	**ρ**	***SD*ρ**	**LL**	**UL**	**LL**	**UL**	***Q***	***I*²**
Performance			91	5,353	.29	.35	.25	.29	.41	.02	.67	366.97*	75.47%
Capability	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Referent shift	Direct team leaders	2	74	.10	.12	.53	–.67	.91	–.56	.81	8.46*	88.17%
Capability	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Team members	5	247	.21	.25	.22	.01	.49	–.04	.53	11.21*	64.33%
Commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Referent shift	Team members	2	90	.43	.51	.00	.44	.59	.51	.51	.14	0%
Satisfaction	Referent shift	Direct team leaders	2	111	.45	.53	.00	.47	.58	.53	.53	.09	0%
Satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Team members	15	942	.26	.31	.16	.20	.42	.10	.52	32.75*	57.25%
Satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—

Satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Team members	8	773	.06	.07	.15	–.06	.21	–.12	.26	17.88*	60.85%
Capability & commitment	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Capability & commitment	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—

Commitment & satisfaction	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Commitment & satisfaction	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Team members	6	233	.17	.20	.00	.05	.35	.20	.20	4.98	0%
Mix of all 3	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Referent shift	Team members	4	155	.56	.66	.38	.26	1.00	.17	1.00	26.09*	88.50%
Mix of all 3	Referent shift	Direct team leaders	5	474	.64	.76	.10	.65	.88	.63	.89	10.34*	61.31%
Mix of all 3	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Team members	14	787	.28	.33	.15	.22	.44	.14	.52	26.13*	50.24%
Mix of all 3	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Team members	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Mix of all 3	Indeterminate	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Direct consensus	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Team members	2	80	.50	.60	.28	.16	1.00	.24	.96	4.74*	78.91%
Indeterminate	Referent shift	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Referent shift	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Team members	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Mixed	Raters outside team	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Team members	18	921	.21	.25	.20	.13	.37	–.01	.51	43.83*	61.21%
Indeterminate	Indeterminate	Direct team leaders	—	—	—	—	—	—	—	—	—	—	—
Indeterminate	Indeterminate	Raters outside team	2	92	.54	.64	.19	.32	.96	.40	.88	3.09	67.62%

Note. k = total number of studies, N = total number of teams, r = sample-size weighted mean correlation, ρ = sample size-weighted mean correlation corrected for unreliability in the predictor and criterion, SD_ρ = standard deviation of the corrected correlations, CI = confidence interval around the mean corrected correlation, Crl = credibility interval around the mean corrected correlation, Q = Cochran's Q, I^2 = percent of total variance attributed to between-studies variance.