PsyCap Review Tool

Version 1

* Required

Article Information

1. Article Title *

2. Article Identifier *

Inclusion/Exclusion Criteria

• Articles sourced using key words search in Scopus. The full text must be available.
• Published between 2017-2022
•The primary research question must be concerned with the relationship between psychological capital and one or more other variables, in which psychological capital is a predictor variable or outcome variable. Studies in which are only concerned with psychological capital as a mediator or moderator will not be included.
• The primary research question must be examined quantitatively using primary data. The main study design must not be a review or meta-analysis, or other secondary study design.
• The study must be observational (i.e., non-experimental) in design, including longitudinal studies. Quasi-experimental studies will not be included.

Definitions

Predictor/independent variable

For this study, "independent variable" or "predictor" refers to the independent variable of interest (in a regression sense) or the primary or antecedent variable being investigated for a possible (non-) causal link to the study outcome, or resulting or end-point variable. It may be labelled by terms such as exposure, factor, protective factor, determinant, intervention, correlate, predictor, cause, or other terms.

Outcome

"Outcome" refers to the dependent or effect variable of interest that is being investigated for a possible link to the predictor variable. It is typically assumed or known to be preceded by the predictor. It is sometimes called the study endpoint variable, consequence, result, and so on.

Linking words/phrases

A word or phrase that describes the nature of the connection between some defined predictor and some defined outcome, generally used in a sentence containing both predictor and outcome. For our purposes, the phrase may contain 1-3 words in the case where one of the words is a preposition to link the predictor and outcome. Examples include: "associated with", "effect", "increased", "link", "correlated with", "impact", "benefit/harm", "predictors", "risk factor", "protective factor", "Influence of", "determinant/determining factor", "exacerbated (or attenuated)", "modified the risk" etc

Modifier words/phrases

A word or phrase that modifies the relationship between the predictor and outcome. This includes adding signals of direction, strength, or doubt to the relationship. This includes phrases like "may be," "positively," "strongly", "potentially", "is likely to…" etc.

Causal linking word/phrase

Causal language implies that one entity influences another. This can be expressed through multiple means, including verbs that imply that movement (or lack thereof) in the outcome was impelled by the predictor of interest (e.g., increase, decrease, improve, changed) but also conjunctions that imply attribution of the outcome to the predictor (because, due to, since). Such causal linking words or phrases may also be further modified to make them appear weaker ("may", "could", "can") without sacrificing the causal implication.

Causal implication of action recommendations

Action recommendations are descriptions of how a consumer of research might utilise the results and conclusions of the research. Recommendations may often imply a causal interpretation of a finding. For example, authors may suggest that it could be beneficial to change the amount of a predictor, which rests on the assumption that the predictor has a causal effect on the outcome. For this project, calls for additional research are not considered to be action recommendations.

3. Independent variable(s) of interest *

A few word description, copied directly from the title and/or abstract. Gather from the title if available, and if not, the introduction section, discussion section, or results section of the abstract (in that order).

4. Outcome variable(s) of interest *

A few word description, copied directly from the title and/or abstract. Gather from the title if available, and if not, the introduction section, discussion section, or results section of the abstract (in that order).

Abstract

Abstract: Linking sentence section

5. Abstract: Primary Linking Sentence(s) *

What is the primary sentence/phase used that contains the linking phrases between the independent variable and outcome variable? The selected sentence must include psychological capital as either an independent variable or outcome variable. Ignore any linking sentences which do not meet this requirement. Copy and paste from the abstract. Preference for this sentence if there are multiple potential sentences should be in order of 1) the conclusions section, 2) the discussion section, 3) the results sections, or 4) somewhere else (or unlabelled sections). Search in particular for a sentence that contains the independent variable, outcome, linking word, and any modifying phrases. If more than one sentence is necessary, copy all necessary sentences. If there are multiple sentences that equally meet these guidelines, choose the first one to occur.

6. Abstract: Primary Linking Word/Phrase *

Based on the sentence copied above, select the primary linking word/phrase and copy it here. The word or phrase should be up to three words maximum, often including a preposition. It should not contain any modifying phrases. If there are multiple words/phrases that meet these guidelines, choose the first one.

_____

7. Abstract: Modifying word/phrases *

Based on the sentence copied above, copy any modifiers here. This means any words or phrases which modify the nature (e.g. strength, intensity, room for doubt, negotiation, direction etc) of the primary linking word/phrase. If not, leave this blank. If there are multiple, separate with a semicolon.

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8. Abstract: How strongly does the language in this sentence imply that the authors identified a causal relationship between the independent variable of interest and the outcome of interest?

Mark only one oval.

- ◯ None: The linking sentence does not imply in any way a causal relationship was identified
- ◯ Weak: The linking sentence might imply a causal relationship was identified, but it is unclear or possible to come to that conclusion in the absence of any causal inference
- ◯ Moderate: The linking sentence mostly implies a causal relationship was identified, but it is unclear or possible to come to that conclusion in the absence of any causal inference
- ◯ Strong: The linking sentence clearly implies that causality had been identified

Abstract: Action Recommendation(s) Section

9. Abstract: Action Recommendation(s) *

Copy (if any) what major claims are made about how a consumer of this research might utilise its results and conclusions. If there are multiple, choose the one which maximally implies causal inference in the question. Note: Actions calling for more research do not apply here. If none, leave blank.

10. Abstract: Action recommendation causal implication *

Choosing the claim which most implies or requires that the evidence from this study was causal in nature, how strongly is this implication made?

Mark only one oval.

- ◯ N/A: No action recommendation(s) provided in this abstract
- ◯ None: The action recommendation would be made appropriately in the absence of any causal relationship
- ◯ Weak: The action recommendation may be made appropriately had a causal relationship been identified, but it is unclear or possible to come to that recommendation in the absence of any causal inference
- ◯ Moderate: The action recommendation most likely could only be made appropriately had a causal relationship been identified, but there is a small possibility that one could come to that recommendation in the absence of any causal inference
- ◯ Strong: The action recommendation could only be made appropriately had a causal relationship been identified

Full text: Introduction/methods

11. Introduction: Causal theory explanation sentence in introduction

Copy sentence(s) in the introduction which contain informal theoretical discussion for why the exposure might be causally linked to the outcome of interest. If no such sentence exists, leave blank.

12. Introduction: Theory explanation causal implication strength *

How strongly does the above sentence(s) imply that there is a causal relationship of interest?

Mark only one oval.

- ◯ N/A: No discussion of how the exposure and outcome are linked is provided
- ◯ None: No theory discussion is provided which implies a possible causal relationship between outcome and exposure
- ◯ Weak: The introduction contains theory which may imply a causal relationship, but it is unclear or ambiguous
- ◯ Moderate: The introduction contains theory which implies a causal relationship, but with some plausible room for doubt
- ◯ Strong: The introduction contains theory about the relationship between exposure and outcome that is explicitly and/or unambiguously causal

13. Introduction/methods: Formal causal model *

Is any formal causal model presented anywhere in this paper? This might include a graphical causal model, equations, simulations etc. While this question is in the Introductions/methods section of this review tool, any formal causal model found anywhere in the article should be included here. Check all that apply.

Check all that apply.

- [ ] Causal Directed Acyclic Graph (DAG)
- [ ] Other graphical causal model (describe in "other")
- [ ] Structural equations model
- [ ] Equation-based toy model
- [ ] Simulation model
- [ ] No, there are no formal causal models presented in this paper
- [ ] Other: _____

14. Introduction/methods: Are there variables controlled, adjusted, matched or stratified on? *

This should be for the "main" specification only (i.e. the result most prominently displayed in the abstract)

Mark only one oval.

- ◯ No
- ◯ Yes

Full text: Discussion/conclusions

Discussion/conclusions: Linking Sentence Section

15. Discussion/conclusions: Primary Linking Sentence(s) *

What is the primary sentence/phase used that contains the linking phrases between the exposure and outcome? Copy and paste from the discussion or conclusions section. Preference for this sentence if there are multiple potential sentences should be in order of 1) the first paragraph of the discussion or conclusions section, 2) elsewhere in the discussion or conclusions section, 3) the results sections, or 4) elsewhere in the text. Search in particular for a sentence that contains the exposure, outcome, linking word, and any modifying phrases. If more than one sentence is necessary, copy all necessary sentences. If there are multiple sentences that equally meet these guidelines, choose the first one to occur.

16. Discussion/conclusions: Primary Linking Sentence(s) *

Mark only one oval.

- ◯ First paragraph of the discussion or conclusions section
- ◯ Elsewhere in the discussion or conclusions section
- ◯ Results section
- ◯ Other:

17. Discussion/conclusions: Primary Linking Word/Phrase *

Based on the sentence copied above, select the primary linking word/phrase and copy it here. The word or phrase should be up to three words maximum, often including a preposition. It should not contain any modifying phrases. If there are multiple words/phrases that meet these guidelines, choose the first one.

18. Discussion/conclusions: Modifying Word/Phrase *

Based on the sentence copied above, select any modifying words/phrases which modify the nature (e.g. strength, intensity, room for doubt, negation, direction, etc) and copy it here. If not, leave this blank. If multiple, separate with a semicolon.

19. Discussion/conclusions: How strongly does the language in this sentence imply that the authors identified a causal relationship between the primary independent variable and the primary outcome? *

Mark only one oval.

- ◯ None: The linking sentence does not imply in any way a causal relationship was identified
- ◯ Weak: The linking sentence might imply a causal relationship was identified, but it is unclear or possible to com to that conclusion in the absence of any causal inference
- ◯ Moderate: The linking sentence mostly implies a causal relationship was identified, but it is unclear or possible to come to that conclusion in the absence of any causal inference
- ◯ Strong: The linking sentence clearly implies that causality had been identified

Discussion/conclusions: Action recommendation(s) section

20. Discussion/conclusions: Action Recommendation(s) *

Copy (if any) what major claims are made about how a consumer of this research might utilise its results and conclusions. If there are multiple, choose the one which maximally implies causal inference in the question. Note: Actions calling for more research do not apply here. If none, leave blank.

21. Discussion/conclusion: Action recommendation causal implication *

Choosing the claim which most implies of requires that the evidence from this study was causal in nature, how strongly is this implication made?

Mark only one oval.

- ◯ N/A: No action recommendation(s) provided in this abstract
- ◯ None: The action recommendation would be made appropriately in the absence of any causal relationship
- ◯ Weak: The action recommendation may be made appropriately had a causal relationship been identified, but it is unclear or possible to come to that recommendation in the absence of any causal inference
- ◯ Moderate: The action recommendation most likely could be made appropriately had a causal relationship been identified, but it is unclear or possible to come to that recommendation in the absence of any causal inference
- ◯ Strong: The action recommendation could only be made appropriately had a causal relationship been identified

Anywhere in text

22. Anywhere in text: Causal disclaimer statements

If there are any statements in the discussion which explicitly mention causality as a cautionary or disclaimer statement, paste them here. Examples may include "correlation does not equal causation", "the observational nature of this study means that causal inferences cannot be drawn", or similar. If not, leave blank.

23. Anywhere in text: Acknowledgement of intent to draw causal inference

If there are any statements in the discussion which explicitly acknowledge an intent to draw causal inference, paste them here. If not, leave blank.

24. Anywhere in text: Is "confounding" or "confounders" discussed or mentioned in relation to the methods, results, and/or interpretation of this study? *

The specific word "confound*" must appear, where * can be any suffix. This must be in reference to the methods, results, and/or interpretation of this study, and not in reference to other studies. Check all that apply.

Check all that apply.

- [ ] No, this does not appear in the study manuscript
- [ ] Yes, in the introduction
- [ ] Yes, in the methods section
- [ ] Yes, in the discussion limitations section
- [ ] Yes, elsewhere in the discussion section
- [ ] Other: _____

25. Additional comments