## pmorphy@uoregon.edu

From:pmorphy@uoregon.edu Sent:7 Mar 2014 18:10:04 -0500 To:info@whatworks.ed.gov

Subject: IES WWC Website: Contact Us: Evidence Standards, Reference ID Number:

1601540122

info@whatworks.ed.gov, this email was automatically sent through the Contact link on the WWC website.

From: pmorphy@uoregon.edu

Message: I just now read your review of Roland Fryer's report :

Fryer, R. G. (2011). Financial incentives and student achievement: Evidence from randomized trials. The Quarterly Journal of Economics, 126, 1755-1798.

http://ies.ed.gov/ncee/wwc/pdf/quick\_reviews/studentincentives\_082410.pdf

I am surprised that you evaluated the report as meeting WWC standards. Differently, my earlier assessment of the work was that the studies reported, especially the Dallas study, had serious and possibly fatal flaws in 1) alignment of criterion measures with treatment(e.g., distal standard reading), 2) absence of proximal measures of reading, 3) incorrect timing of measures (too distant for reading, too proximal for motivation) 3) incorrect measures to rule out motivational losses (used earliest form of 'intrinsic motivation' measure and least valid per Richard Ryan), and so on.

Basically, the Fryer studies did not reflect major tenets laid out by NRC in the same year (Incentives and test-based accountability in education Washington, DC: National Academies Press; not that the NRC report is needed to deduce what might have been had from reflection alone).

It concerns me that the WWC would appear to be basing some its reports of evidence on issues of experimental design and analysis absent consideration of more substantive issues of content and theory. While this may not be the case across the board, I am fairly certain that this series should not have the WWC imprimatur and would not have approved this particular series for journal publication had I been a reviewer.

I mean these comments for your consideration and thank you for your efforts to bring research to light.

Best regards,

# **What Works Clearinghouse**



August 2010

# WWC Quick Review of the Report "Financial Incentives and Student Achievement: Evidence From Randomized Trials"

# What is this study about?

This study examined the effect of financial incentives on student achievement.

The study analyzed data on approximately 38,000 students from about 260 public schools in Chicago, Dallas, New York City, and Washington, DC.

In each city, about half of the schools were randomly assigned to begin a student incentive program; the other half were assigned not to offer incentives.

Researchers measured the incentives' effect by comparing students' achievement levels in schools with and without the program.

Student achievement was measured using standardized reading and math tests administered by each school district as part of its regular accountability program.<sup>2</sup>

#### How Were Financial Incentives Awarded?

Chicago: Ninth-graders received \$50 for each A, \$35 for each B, and \$20 for each C they received in five core courses at the end of each five-week grading period. Half of the rewards were given immediately after the grading periods ended, and the other half were held in an account to be distributed upon high school graduation.

Dallas: Second-graders were paid \$2 for every book they chose to read on their own, for up to 20 books per semester. Students had to pass a quiz about each book to verify they had read it.

New York City: Fourth-graders earned up to \$250 per year, and 7th-graders up to \$500 per year, for their performance on 10 school exams.

Washington, DC: Middle school students earned up to \$10 per day for attending school, exhibiting good behavior, and other measures that varied by school, such as wearing a uniform or completing homework.

Researchers considered the programs in Chicago and New York City "output" experiments, because their incentives were tied directly to educational outputs such as grades and test scores. The programs in Dallas and Washington, DC were considered "input" experiments, because their program incentives encouraged behaviors expected to improve grades and test scores.

(continued)

<sup>&</sup>lt;sup>1</sup> Fryer, R. G. (2010). *Financial incentives and student achievement: Evidence from randomized trials* (NBER Working Paper 15898). Cambridge, MA: National Bureau of Economic Research.

<sup>&</sup>lt;sup>2</sup> The study also examined other outcomes, such as student behaviors, daily attendance, report card grades, and effort. These outcomes fall outside the scope of the quick review protocol, and effectiveness of incentives on these outcomes is not evaluated in this quick review.

# What did the study author report?

The study found no statistically significant effects on standardized math or reading outcomes in Chicago, New York City, or Washington, DC.

Out of six standardized reading achievement outcomes measured in Dallas, the study found two statistically significant effects. Among English speakers, students in the incentive schools scored approximately 0.18 standard deviations higher on English reading comprehension than students who were not eligible for incentives; the WWC interprets this as roughly equivalent to the difference between the 50th and 57th percentile of reading comprehension.

Among Spanish speakers, students in the Dallas incentive schools scored approximately 0.17 standard deviations lower in English reading vocabulary than students who were not eligible for incentives.

## **WWC Rating**

# The research described in this report is consistent with WWC evidence standards

*Strengths:* This was a well-implemented randomized controlled trial.

Cautions: Although no schools were dropped from the analysis, it is unclear how many students left the schools over the course of the study. If attrition was high, any observed differences between the groups may have resulted from the types of students remaining in each group.

#### WhatWorks

From: What Works

Sent:12 Mar 2014 18:53:39 +0000

To: 'pmorphy@uoregon.edu'

Subject: What Works Clearinghouse (WWC 4604)

Hello,

Thank you for contacting the What Works Clearinghouse (WWC).

We have received your email below. The WWC quality review team is reviewing your email and will prepare a written response. The quality review team responds to concerns raised by study authors, curriculum developers, or other relevant parties about WWC reviews published on our website. These quality reviews are undertaken when concerned parties present evidence that a WWC review might be inaccurate. When a quality review is conducted, a researcher who was not involved in the initial review undertakes an independent assessment of the study in question. The researcher also investigates the procedures used and decisions made during the original review of the study. If a quality review concludes that the original review contained errors, a revision will be published. These quality reviews are one of tools used to ensure that the standards established by the Institute of Education Sciences are upheld on every review conducted by the WWC.

Thank you,

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----Original Message----

From: pmorphy@uoregon.edu [mailto:pmorphy@uoregon.edu]

Sent: Friday, March 07, 2014 6:10 PM

To: info@whatworks.ed.gov

Subject: IES WWC Website: Contact Us: Evidence Standards, Reference ID Number: 1601540122

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Best regards,

## Paul Morphy

From:Paul Morphy

Sent:12 Mar 2014 19:02:54 +0000

To:WhatWorks

Subject: RE: What Works Clearinghouse (WWC 4604)

Hello,

Thank you for letting me know. WWC is an important resource to so many. I appreciate your attention and would be happy to discuss or elaborate my concerns as needed.

Best, Paul

\*\*\*\*\*\*\*\*\*\*\*

Saul Morphy
Paul Morphy, Ph.D.

IES Postdoctoral Research Fellow

University of Oregon

Center on Teaching and Learning and

Oregon Research Institute

1600 Millrace Drive, Suite 108

Eugene, OR 97403

541.346.8109 (voice)

541.346.8353 (fax)

615.497.8348 (cell)

\*\*\*\*\*\*\*\*\*\*

From: WhatWorks [mailto:What.Works@icfi.com] Sent: Wednesday, March 12, 2014 11:54 AM

To: Paul Morphy

Subject: What Works Clearinghouse (WWC 4604)

Hello,

Thank you for contacting the What Works Clearinghouse (WWC).

We have received your email below. The WWC quality review team is reviewing your email and will prepare a written response. The quality review team responds to concerns raised by study authors, curriculum developers, or other relevant parties about WWC reviews published on our website. These quality reviews are undertaken when concerned parties present evidence that a WWC review might be inaccurate. When a quality review is conducted, a researcher who was not involved in the initial review undertakes an independent assessment of the study in question. The researcher also investigates the procedures used and decisions made during the original review of the study. If a quality review concludes that the original review contained errors, a

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I mean these comments for your consideration and thank you for your efforts to bring research to light.

Best regards,

# What Works Clearinghouse WWC

A central and trusted source of scientific evidence for what works in education.

April 21, 2014

Dr. Paul Morphy
Center on Teaching and Learning and
Oregon Research Institute
1600 Millrace Drive, Suite 108
Eugene, OR 97403
pmorphy@uoregon.edu

Dear Dr. Morphy,

Thank you for your email concerning the What Works Clearinghouse (WWC) quick review of R.G. Fryer's (2010) study entitled, "Financial Incentives and Student Achievement: Evidence from Randomized Trials" (Released August 2010). In response to your inquiry, we conducted an independent quality review to address the issues you raised. The WWC quality review team responds to concerns raised about WWC reviews published on our website. When a quality review is conducted, a researcher who was not involved in the initial review undertakes an independent assessment of the study in question. The researcher also investigates the procedures used and decisions made during the original review of the study. These quality reviews are one of tools used to ensure that the standards established by the Institute of Education Sciences (IES) are upheld on every review conducted by the WWC.

In your email dated March 7, 2014, you stated that this study had serious flaws in measurement (in particular, related to the timing of outcome data collection): (1) alignment of criterion measures with treatment (e.g., distal standard reading), (2) absence of proximal measures of reading, (3) incorrect timing of measures (too distant for reading, too proximal for motivation), and (4) incorrect measures to rule out motivational losses. You also stated that the study did not reflect the National Research Council's work on identifying challenges introduced when incentives are used in education. Finally, you expressed concern that content and theory are not reflected in the WWC review process.

The quality review investigated the issues you raised, revisited our review of the study, and came to the following conclusions.

Regarding your concerns about measurement, the independent quality review confirmed that the WWC properly followed its procedures for conducting its Quick Review of the Fryer study under the standards and procedures that were in effect when the quick review was released. The applicable Quick Review Protocol (version 2.0, updated April 2009) did not specify parameters on the timing of

# What Works Clearinghouse WWC

A central and trusted source of scientific evidence for what works in education.

outcome measures (since it covered a broad array of topics) and did not have standards regarding the overalignment of outcome measures. The current version of the Quick Review Protocol (version 2.1, released August 2012), requires that all studies identified for a Quick Review will be reviewed under an existing topic area protocol (used to develop Intervention Reports) if the intervention and population group for the study are eligible for review under that protocol. The topic-specific protocol guides the selection of eligible outcomes and domain definitions, as well as specifying the parameters on the timing of outcome measures. Additionally, under version 2.1 Quick Review Protocol, a study's rating is to be based only on outcome measures that are not overaligned with the intervention.

The independent quality review does not recommend revising the Fryer Quick Review because it consistent with the protocol under which it was reviewed. Should there be a follow-up intervention report that includes this study, or this study is selected for a Single Study Review, the report will include details on the timing of measurement and the issue of overalignment will be considered when rating the study using WWC evidence standards.

Regarding your concerns that the review did not reflect the National Research Council's work and that content/theory considerations are not included in our reviews, we would like to clarify the WWC's mission and the purpose of its products. The WWC aims to promote informed education decision making through its systematic reviews, identifying which education studies meet rigorous research standards to help education decision makers differentiate high-quality research from weaker research and promotional claims. The WWC involves nationally recognized content experts to assist in the substantive development of each review protocol, including the types of interventions to be included, populations to be studied, outcome domains, and outcome parameters (including timing). However, when reviewing actual studies, the WWC standards do focus on design and analysis to determine whether the analysis provides a rigorous test of the intervention being examined.

I hope that this letter has addressed your concerns. If you have other concerns, please do not hesitate to contact the WWC through <a href="mailto:info@whatworks.ed.gov">info@whatworks.ed.gov</a>.

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| Neil Sef | tor                        |
| Director | , What Works Clearinghouse |

#### What Works

From: What Works

Sent:21 Apr 2014 16:59:55 +0000

To: 'Paul Morphy'

Subject:RE: What Works Clearinghouse (WWC 4604) Attachments:QRT 2014004 Response \_4.21.2014.pdf

Dear Dr. Morphy,

Attached is a response to the questions you raised on March 7, 2014 concerning the What Works Clearinghouse quick review of *Financial incentives and student achievement: Evidence from randomized trials*.

Thank you,

What Works Clearinghouse

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From: Paul Morphy [mailto:pmorphy@uoregon.edu]

Sent: Wednesday, March 12, 2014 3:03 PM

To: WhatWorks

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IES Postdoctoral Research Fellow.

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