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Critical Points in Lemke's Total Worker Health Calculus

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To the editor:

In his recent editorial, Michael Kenneth Lemke makes the assertion that shortcomings within the Total Worker Health [TWH] program are due to its theoretical and methodological grounding in the "Newtonian paradigm." According to Lemke, the long-term potential of the TWH program is threatened by the hegemony of reductionism. We assert that Lemke's reasoning, and therefore, his conclusions are flawed. Moreover, we believe that his characterization does little to promote, and may hinder, the ability of the TWH program to fulfill its mission.

Lemke's freestyle reasoning is replete with formal and informal logical fallacies that are so common that they have names (e.g., false premise², incomplete comparison³, non sequitor⁴, Straw Man⁵, cherry picking⁶, Texas sharpshooter⁷). In fact, the editorial's deficient reasoning and inadequate substantiation are so glaring that several of us initially suspected the editorial was a scholarly publishing sting—a hoax not unlike the Sokal Affair⁸--submitted to test the journal's intellectual rigor. However, the discovery of prior criticism⁹ suggest that this display is simply added posturing.

For example, in Lemke's editorial, his criticism of TWH begins with the premise that

"As is true of the social sciences in general, the epistemology of TWH is grounded in theoretical and methodological assumptions and approaches that are representative of what may be called a 'Newtonian paradigm."

Lacking substantiation and quickly evident to be a 'false premise'², this 'incomplete comparison'³ is followed by this assertion:

"Within [the Newtonian] paradigm, phenomena of interest—such as OSH outcomes—are assumed to be deterministic, mechanistic, and predictable."

A non sequitur⁴, this claim is supported by citing the works of Louth¹⁰, Haupt¹¹, and Gershenson¹² [Lemke's references 9, 10 and 11]. Here again, Lemke misses his mark as none of the three citations suggest that OSH outcomes or, for that matter, the social sciences after World War I, are grounded in a 'Newtonian paradigm.' So, while true that Newtonian outcomes are "deterministic, mechanistic, and predictable," Lemke fails to establish a plausible connection to the TWH paradigm or current social sciences methods.

Consequently, the validity of any conclusions based on that premise remains in question.¹²

Undeterred, Lemke continues to attack his Straw Man⁵ using cherry-picked⁶ examples in an attempt to convince readers that he has hit his mark (known coincidently as the Texas sharpshooter fallacy⁷). Clearly, he has not.

While a rebuttal of Lemke's editorial, this response should not be read as a blanket defense of the TWH program. TWH has been evolving for more than a decade¹³ and will continue to evolve to address the complex challenges we face today and as the future of work unfolds.¹⁴ We agree that any system must be open for incremental change and reconsideration. However, any discussion of possible shortcomings or potential improvements within the TWH program should be rational and objective. We encourage JOEM readers to consider the body of TWH research, practical tools, and educational offerings to see where the field has been and where it is headed, to promote the health, safety, and well-being of workers.¹⁵

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