

Review of: "Assessment of Children's Toys Suitability Index Instrument (Toy Index)"

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The authors introduce a method to evaluate toys towards their suitability for kids in Malaysia. They take help from experts in the field to propose evaluation criteria. Then, they use AHP to calculate local and global weights for the criteria which they propose to use for calculating a toy's index. Here are some of my thoughts on the paper,

The authors claim that no existing methods or instruments exist that can assess toys. This however is not true. For example, read,

Trawick-Smith, J., Russell, H., Swaminathan, S., 2011. Measuring the effects of toys on the problem-solving, creative and social behaviors of preschool children. *Early Child Dev Care* 181, 909–927.

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The authors introduce the paper assuming that money is the primary motivator for industries without referencing previous work. This creates a bias for the reader. I urge the authors take a more neutral ground in the introduction and then introduce the problem, to improve the credibility of the paper.

It is not clear why the authors chose FDM or AHP for phases 1 and 2.

Add a literature survey clearly motivating why the initial set of parameters were chosen before being presented to the expert panel. In its current state, it is hard to see where these parameters come from.

Further, it is important to check if your list of initial parameters are exhaustive. Perform an appropriate test to validate this. In other words, if 4 factors are chosen to represent phenomenon A, then we have to make sure that there is no significant 5th factor that one has forgotten to consider.

In the AHP step, the authors calculate weights but they do not mention an evaluation scale. Without such a scale, AHP would be incomplete. For example, how does one score 'Flexible products – can be lifted and taken elsewhere' under 'Suitability of Playing'. If the author intends to use it in practice by getting such a metric evaluated by an expert, then there will be a big risk of bias and the result cannot be trusted. Correspondingly, efforts need to be made to make the scoring system quantitative. After this step, the author should consider using a fuzzy AHP approach.

It is a very interesting study but at this stage, it feels incomplete. If it can be further refined, this could be a very good paper.

