Review of: "Exploiting Structure: A Survey and Analysis of Structures and Hardness Measures for Propositional Formulas"

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Potential competing interests: No potential competing interests to declare.

- Given that from Section 3 on, you focus on DPLL algorithms, I strongly suggest you to introduce them properly (i.e., with all the definitions, properties, and discussions) in Section 2. You are writing a survey, so there is no reason to omit their presentation.

- You should provide some motivation behind your choices in the selection of the hardness measures: why did you decide to present those ones? Why did you not include the centrality measures discussed in Section 5? Since you are presenting a survey on these methodology, you need either to make your survey exhaustive, or to thoroughly justify your choices.

- The final discussion in Section 3.2.2 is unsatisfactory: you cannot infer that the techniques from [1] cannot be applied to CNF formulae, only from the fact that the formula in your running example is not comparable to the ones used in the referenced paper. Conversely, you should analyse the fact that the two hardness measures, CVR and BVR, give contradictory results on the considered formula. Are the results really in contradiction? What kind of information can we gain from them separately? And considering both measures?

- In the entire paper, the occurrences of the verb "allow" are all grammatically incorrect. You can either use "allow + someone + to + verb" or "allow + for + something". Please correct them.

- As another general comment, there are a lot of commas missing throughout the paper. Please check it again.

- page 1, col 1, line -2: Something seems wrong with this sentence, please check it.

- page 1, col 2, 4 lines below Def 2.1: "It is sufficient to only...", you did not mention the purpose: for doing what it is sufficient?
Same problem on page 2, col 1, 8 lines above Def. 2.7.

- page 2, col 2, Def. 2.8: Please provide also the definition of weighted distance.

- page 2, col 2, Fig.1: The caption and the Figure do not match on the Transaction feature (singular vs plural).

- page 2, col 2, line 6 of Sec 2.2: "For the example model M,", please consider adding a reference to Fig. 1 also here.

- page 5, col 1, line 1: "instances of same" should be "instances of the same".

- page 5, col 1, line 10 of section 3.2.1: "comparably few clause" should be "comparably few clauses".

- page 5, Fig. 5: What do L and N denote?

- page 6, col 2, line 3: "induce an autark" should be "induce autark"