Reviewer's report

Title: Parent's alcohol use and family interaction associated with the initiation of alcohol use by the sixth graders: A preliminary study in Taiwan

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Reviewer: John Getz

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MAJOR COMPULSORY REVISIONS

The authors correctly note the importance of their topic (initiation of alcohol use by pre-adolescents) Further they correctly identify parental alcohol use and variables in the domain of family interaction factors as predictors of initiation.

However they incorrectly suggest that "little research" has been conducted exploring the "relationship between family interaction factors and first use of alcohol by children and adolescents" (p.4). This article would be greatly enhanced by attention to the following issues.

1. More Elaborate Enumeration and Definition of Conceptual Variables That Research Literature Has Linked to Preadolescent Initiation of Alcohol Use.

For example, the impact of mother's use of alcohol and father's use of alcohol on child's initiation have been investigated in the context of the variables: communication with mother, communication with father, mother's monitoring, father's monitoring, and family conflict.

2. More Systematic Theoretical Discussion of How Predictor Variables Might Relate Causally to Each Other As Well As to Alcohol Initiation.

Several interesting suggestions made by the authors could be further developed. For example, parental alcohol use might predict pre-adolescent child's initiation because drinking parents spend less time interacting with their children (p.4). The implication is that the relation between parental drinking and child's initiation of alcohol is mediated by quantity and/or quality of communication with the child. Alternatively quality of parental monitoring might be a mediating variable here.

An alternative possibility is that parental drinking is a marker for dysfunctional, conflicted family relationships that constitute a noxious social environment for the children. If this were true one might hypothesize that parental alcohol use is positively correlated with family conflict but negatively correlated with parental support. The authors might provide a zero order correlation matrix of all variables used in the analysis so that such hypotheses could be tested. Another sound rationale (p.11) involves role modeling in the context of Bandura's social learning theory. Authors should try to link their choice of conceptual variable predictors (mother's alcohol use, father's alcohol use, parental support, family conflict, and violent tendencies) to a common theoretical perspective/rationale/model.
2. Clearly Articulate Propositions Derived from Theoretical Perspective.
Then clearly state hypotheses regarding measures.

It is understood that this is a secondary analysis and that the authors are drawing
measures from the CABLE survey instrument. But each measure should be
discussed in more detail. E.g., state all survey items that constitute the parental
support and family conflict scales. Demonstrate validity and reliability of
measures if possible; i.e., can other items in the survey be correlated with
predictor measures to demonstrate construct validity? Suggestions in 2 above
relate to this. Also, perform factor analysis on scale items. Run Cronbach's alpha
for scales.

For an example, see:
Getz, J. Greg, & Bray, James H. (2005). Predicting Heavy Alcohol Use Among

4. External Validity & Attrition Analysis.
The sample analyzed (n=1183) was 47% of the original sample of 2499 from
cohort 2. How different is the sample analyzed from the original, e.g.,
demographically and with regard to scores for dependent and predictor
variables? I.e., can authors legitimately generalize to "children at public schools
in Northern Taiwan."

5. Regarding Analysis and Results.
Logistic regression is an appropriate technique, but authors need to provide more
detail on how the measures were coded and why coding choices were made.
E.g., mother's alcohol use, father's alcohol use, and mother's & father's joint
alcohol use were entered simultaneously into the equation. Was the latter
variable intended as an interaction term in which case hierarchic entry should
have been chosen. Was both parents alcohol use presumed to reflect only more
opportunity for child's observation of alcohol use or might it reflect a qualitatively
different meaning attached to use than if only one parent is drinking? Need to
provide more detail re: parameters in Table 3. Explain difference between Beta
parameter and odds ratios. Noted are statistically significant predictors but mean
differences (Table 2) seem quite small (except for both parents ever users).
Authors need to make a case for substantive significance in addition to statistical
significance which is highly likely with such a large sample size. Lastly, a
rationale should be provided for including the seven "background factors" in the
equation. It is understood that these variables are not central to the article's focus
on parental alcohol use, parental support, and family conflict as predictors of
child alcohol initiation. But their presence in the analysis might effect parameter
magnititudes of predictors you are interested in. For example, what is the
correlation between violent tendencies and family conflict? If substantial, then
removing violent tendencies from the equation might result in predictive
significance for family conflict. The reader cannot know because correlations are
not provided nor have alternative logistic regression models been run to test
these possibilities. These are the kinds of issues the authors should be addressing to add refinement to their analysis and its interpretation.

6. Of interest is cross cultural comparison possibility (p.11). Could emphasize aspects of collectivistic vs. individualistic culture (Taiwan vs. U.S) that contextualize this research. E.g., meaning of parents drinking alone vs. drinking together as influence upon child.

7. Family Conflict Did Not Predict Initiation. This Contradicts Research from U.S. that shows family conflict to be a relatively robust predictor of adolescent alcohol use including initiation. Is non-significance here a) an artifact of the analysis, e.g., presence of violent tendencies, in the equation as noted above, or b) the result of family conflict scale non-validity or non-reliability, or c) the result of some cross cultural difference in the attribution of meaning to family conflict making it less a risk factor for Chinese youth.

8. Statements Confusingly Worded or Lacking Clear Rationale. Some statements made by the authors require more detail or explanation to make sense. For example, authors state (p.12) that maybe non-prediction by family conflict compared to parental support was because "age of onset ... was younger and therefore parental support had a stronger influence on initiation of alcohol use than family conflict". It is not clear why younger age of onset should favor predictive strength of parental support over that of family conflict.

An example of a confusingly worded statement is, "definitions of never use have often been limited to either not using alcohol for only a specified period of time or using below a specified quantity of alcohol" (p. 10). Surely the authors do not mean to suggest that some researchers intentionally have defined abstention/never use as distal use or minimal quantity use. What they probably mean is that some researchers have had to settle for distal or minimal use instead of an affirmation of never initiated because the survey items were written that way by others. An example of poor editing is found in Table 2. In column one, parental support and family conflict are entered redundantly as both the first two and last two variables. Furthermore, Table 2 seems misnamed because not only does it include background demographic characteristics but also the independent variables of central concern in the analysis. The article needs to be reviewed for such examples and edited.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests.