Explicating the Role of Individual Variables in a Study

Every “variable” is either...

<table>
<thead>
<tr>
<th>Constant</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>1*</td>
</tr>
<tr>
<td>Manipulated</td>
<td>3*</td>
</tr>
</tbody>
</table>

Exp

Quasi Exp

Non-Exp

Variable Role Explication Script

1. Is the target variable measured or manipulated?
2. Is the target variable the IV ? the DV ?
3. Is the target variable reasonably a constant ?
   - if so ... constant value ... constant → controlled
   - if so ... constant value = 0 ... elimination → controlled
4. Is the target variable a matching/yoking variable ?
   - if so ... matched → balanced → controlled
5. Based on the research design ... Is there RA/CB ?
   - if so ... RA → balanced → controlled
6. Answers to 3, 4 & 5 all “no”
   - if so ... target variable is a confound
   - if measured variable → initial eq problem
   - if manipulated variable → ongoing eq problem

Every Variable in Any Study has 1 of 8 Roles !!!

1. Causal Variable/IV 2 or 4*
2. Effect Variable/DV 2*
3. Measured/Subject Variables
4. Control Variable 2*
   - Initial Equivalence
5. Confounding Variable 2*
6. Manipulated/Procedural Variables
7. Control Variable 4*
   - Ongoing Equivalence
8. Confounding Variable 4*

<table>
<thead>
<tr>
<th>BG</th>
<th>WG</th>
<th>MG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance all subject variables by RA</td>
<td>Balance all subject variables by CB</td>
<td>Balance matching variables by matching. Balance all other subject variables by RA</td>
</tr>
<tr>
<td>All subject variables are confounds</td>
<td>Seriated nature of IV controls all subject variables</td>
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