Summary Notes on Statistical Elaboration

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| Name of Effect | Crosstab | Symbolic | Regression |
|-------------------------------|---|---|--|
| | Results | Representation | Results |
| Replication | Same results in control tables as in original table without controls | Irrespective of Z X←→Y | X predicts Y with and without Z being in equation |
| Specification (moderation) | Only one (or some) of control tables show relationship from original table | If $Z = 1$ $X \leftarrow \rightarrow Y$ If $Z \neq 1$ $X \leftarrow /\rightarrow Y$ Or, preferably X $Z \rightarrow XZ \rightarrow Y$ | An interaction term of the form X*Z predicts Y |
| Interpretation (mediation) | All control tables show weaker relationship than original table | X→Z→Y | Entering Z into equation reduces or eliminates X's influence on Y |
| Explanation | All control tables show weaker relationship than original table | $X \leftarrow / \Rightarrow Y$ | Entering Z into equation reduces or eliminates X's influence on Y |
| Suppression | Control tables reveal a relationship that was not evident in original table without controls | Without control for Z: $X \leftarrow / \rightarrow Y$ With control for Z $X \leftarrow \rightarrow Y$ | Entering Z into equation allows X to predict Y |
| Distortion | Control tables show complex pattern of results | | Entering Z into equation produces complex pattern |