A study conducted in Dunedin, New Zealand investigated whether wearing socks over shoes could help people to walk confidently down an icy footpath. Participants were randomly assigned to wear socks over their usual footwear, or to simply wear their usual footwear, as they walked down an icy footpath. One of the response variables recorded was whether an observer considered the participant to be walked confidently.

For each of the following, answer YES or NO to indicate whether it provides a good reason for why the researchers used random assignment to put subjects into groups.

1. To give all walkers in New Zealand the same chance of being selected for the study
   - YES
2. To produce groups that were as similar as possible in all respects before the explanatory variable was imposed
   - YES
3. In order to produce a large enough sample size
   - NO
4. So a cause-and-effect conclusion between wearing socks over shoes and appearing to walk more confidently would be justified, if the difference between responses in the two groups turned out to be statistically significant
   - YES
5. So results could be generalized to all people who walk on icy surfaces
   - NO