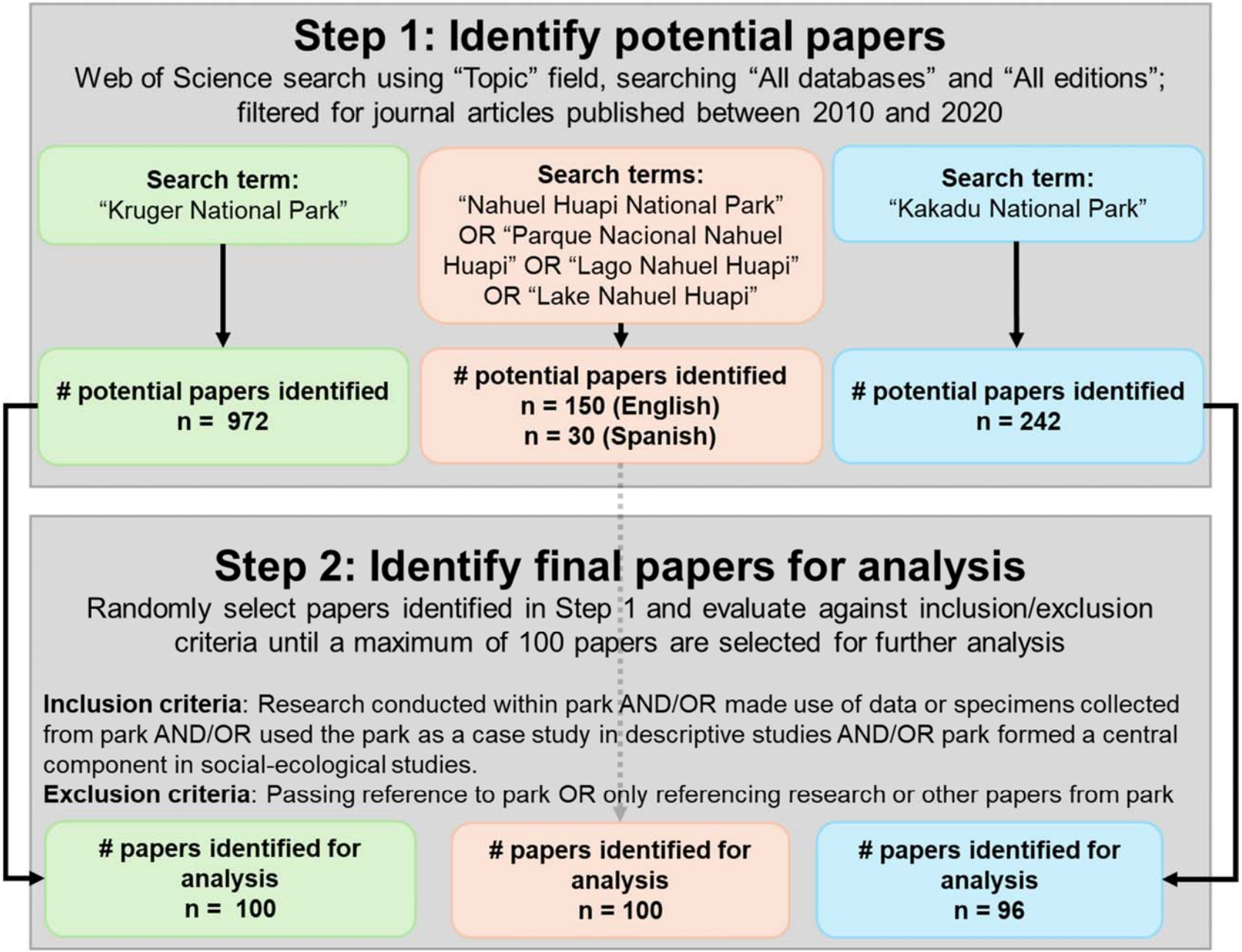Appendix S2: Summary of searching and sampling framework