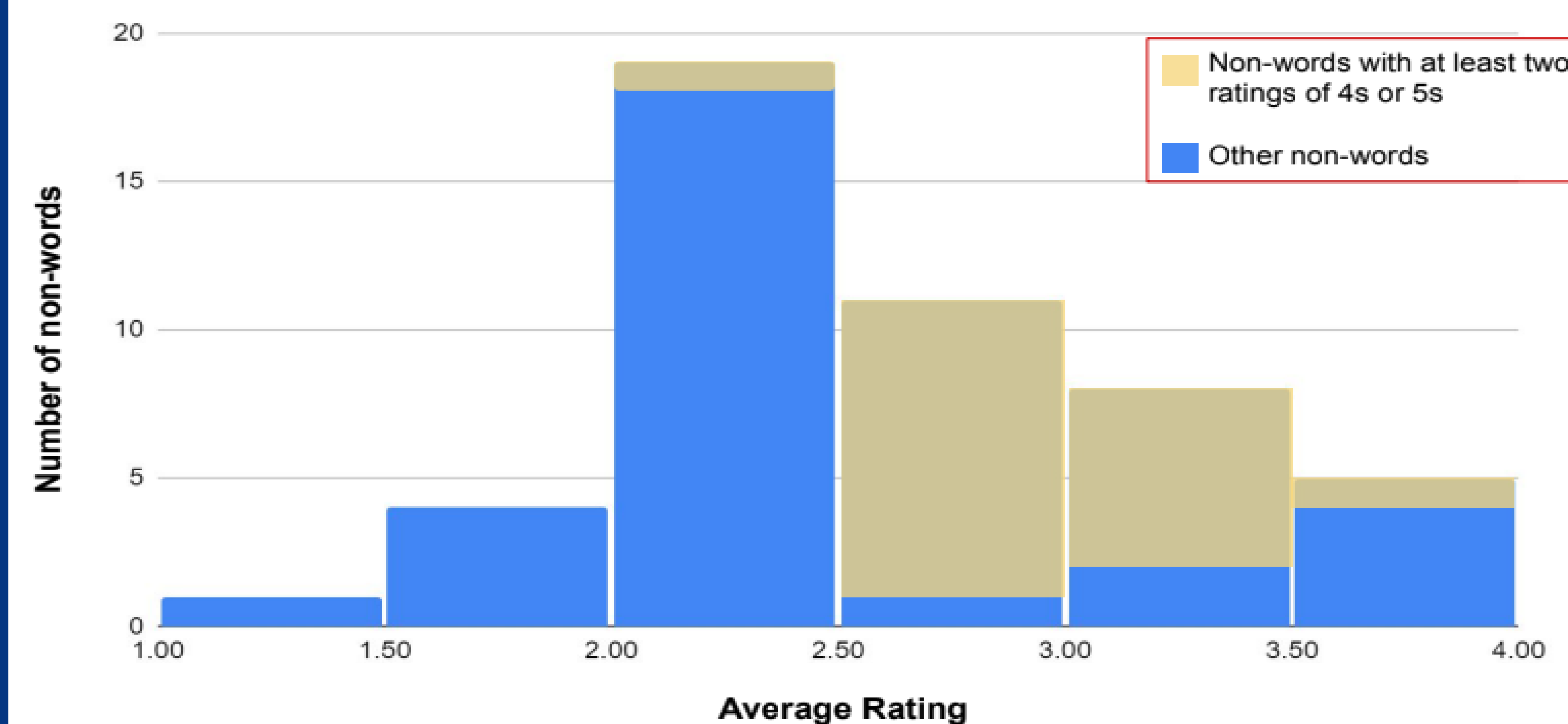


## BACKGROUND

Patients' genetic literacy is a key component of patients' understanding of their genetic testing. The Genetic Literacy Fast Test (GeneLiFT) assesses genetic literacy using a combination of words associated with genetics and non-words and was shown to be more associated with genetic knowledge than education or health literacy<sup>1</sup>. In this study, GeneLiFT was adapted into Spanish (Spanish GeneLiFT) to allow assessment of genetic literacy among Spanish-speaking persons.

## RESULTS

Figure 2: Rating Distribution of Spanish GeneLiFT Non-words



## CONCLUSION

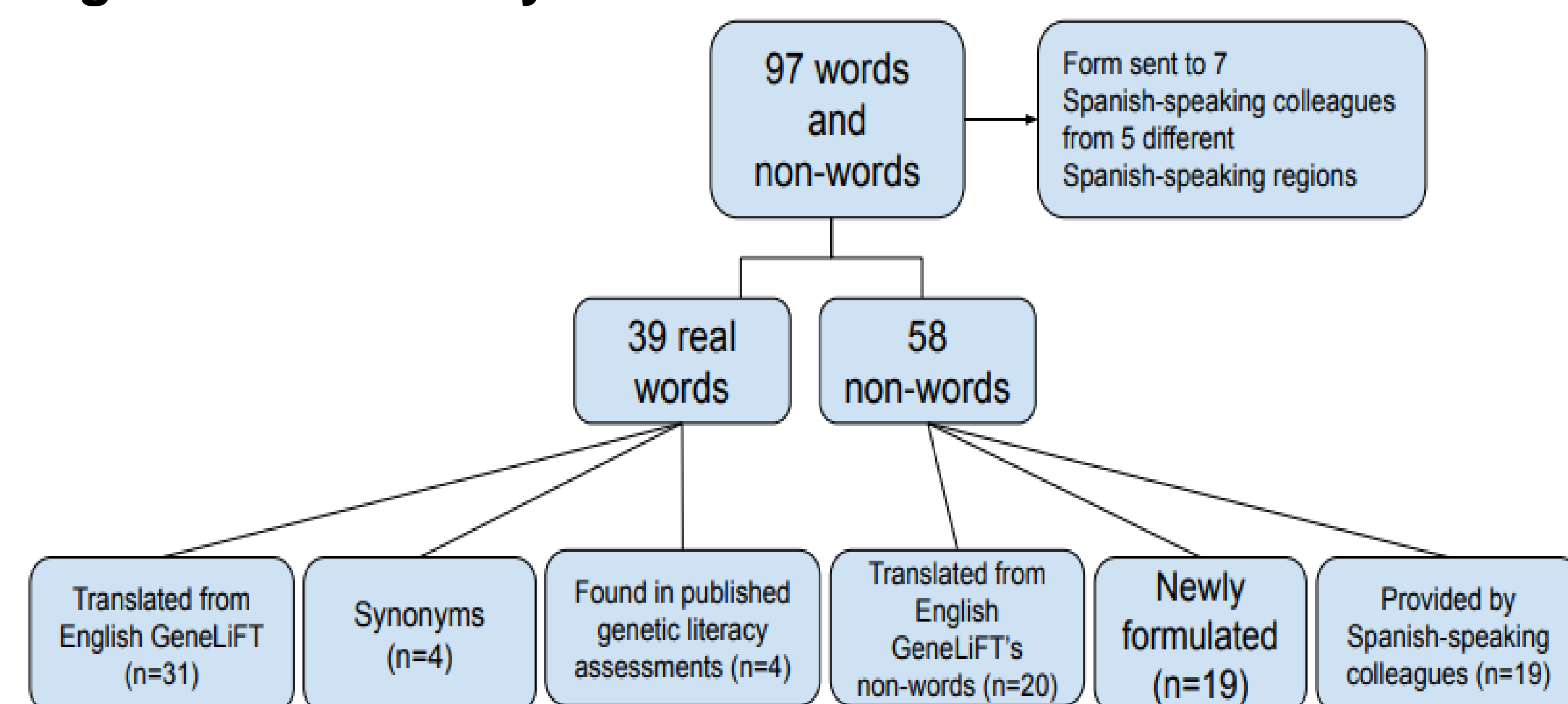
**Future directions:** The validation of Spanish GeneLiFT will be done using a Spanish-adapted 14-item survey, as was done for the validation of the English GeneLiFT.

The survey will be circulated to Spanish speakers via Amazon Mechanical Turk.

**Conclusion:** Spanish GeneLiFT is expected to serve as a rapid genetic literacy assessment for Spanish-speaking populations.

## MATERIALS AND METHODS

Figure 1: Summary of Methods



A literature review of existing measures to assess the genetic literacy of Spanish-speaking populations was conducted, and 3 papers were identified<sup>2,3,4</sup>. 19 new non-words were generated by considering genetic words in English and modifying them to formulate Spanish non-words.

To classify words into 'used only in genetics', 'used in genetics and other fields', 'not used at all', or 'don't know', 7 Spanish-speaking colleagues were contacted. The colleagues were also asked to rate how much the non-words sound like a real Spanish word, using a 5-point likert scale with 5 being 'highly sounds like a real Spanish term.'

The list of Spanish GeneLiFT words was modified based on the colleagues' answers: For the 39 real words, words with at least three responses of 'Not used' or 'Don't know' were removed, resulting in the removal of 1 word. For the 58 non-words, the criteria to include a non-word were: non-words with an average rating above 3, non-words with at least two ratings of 4s or 5s, and 9 additional non-words were recommended by a Spanish-speaking colleague. The initial list of 97 words and non-words was thus reduced to a list of 38 words and 32 non-words.

Figure 3: Modified list of 70 Spanish GeneLiFT Words and Non-words

Key: Non-words (red), Genetic-specific words (blue), Genetic-related words (green)

1. Alelositio	25. Consentimiento	48. Genotipo
2. Cariotipo	26. Paleto	49. Portador
3. Cromosoma	27. Citocigoto	50. Patocitémico
4. Variante	28. Predisposición	51. Dominante
5. Susceptibilidad	29. Quimiobenigno	52. Trisopatía
6. Fenotipo	30. Aclirio	53. ADN
7. Accionabilidad	31. Deximetriolítico	54. Nucleosomatía
8. Farmacogenómica	32. Clesula	55. Moncrosoma
9. Secuación	33. Patogenicidad	56. Transportador
10. Descendencia	34. Microbiotón	57. Depretón
11. Autosoma	35. Diagnósis	58. Secuenciación
12. Recessivo	36. Preventivo	59. Limbertula
13. Prebiocular	37. Molecular	60. Nucleotocidad
14. Genoma	38. Gentosis	61. Depretón
15. Mutación	39. Exón	62. Hereditario
16. Amirloclaustrio	40. Gen	63. Herencia
17. Quimosómico	41. Polygeniación	64. Glen
18. Alelo	42. Exoma	65. Penetrancia
19. Probabilidad	43. Filogeno	66. Esporádico
20. Filógeno	44. Lenotipo	67. Nucleosomatencia
21. Anormalidad	45. Moleculativo	68. Cromocigoto
22. Heterocigoto	46. Homocigoto	69. Homgoto
23. Nucleotocidad	47. Microbiotón	70. Patogenia
24. Diagnóstico		

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## ACKNOWLEDGEMENTS

We would like to thank the Spanish-speaking colleagues who provided their expertise in this project.



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