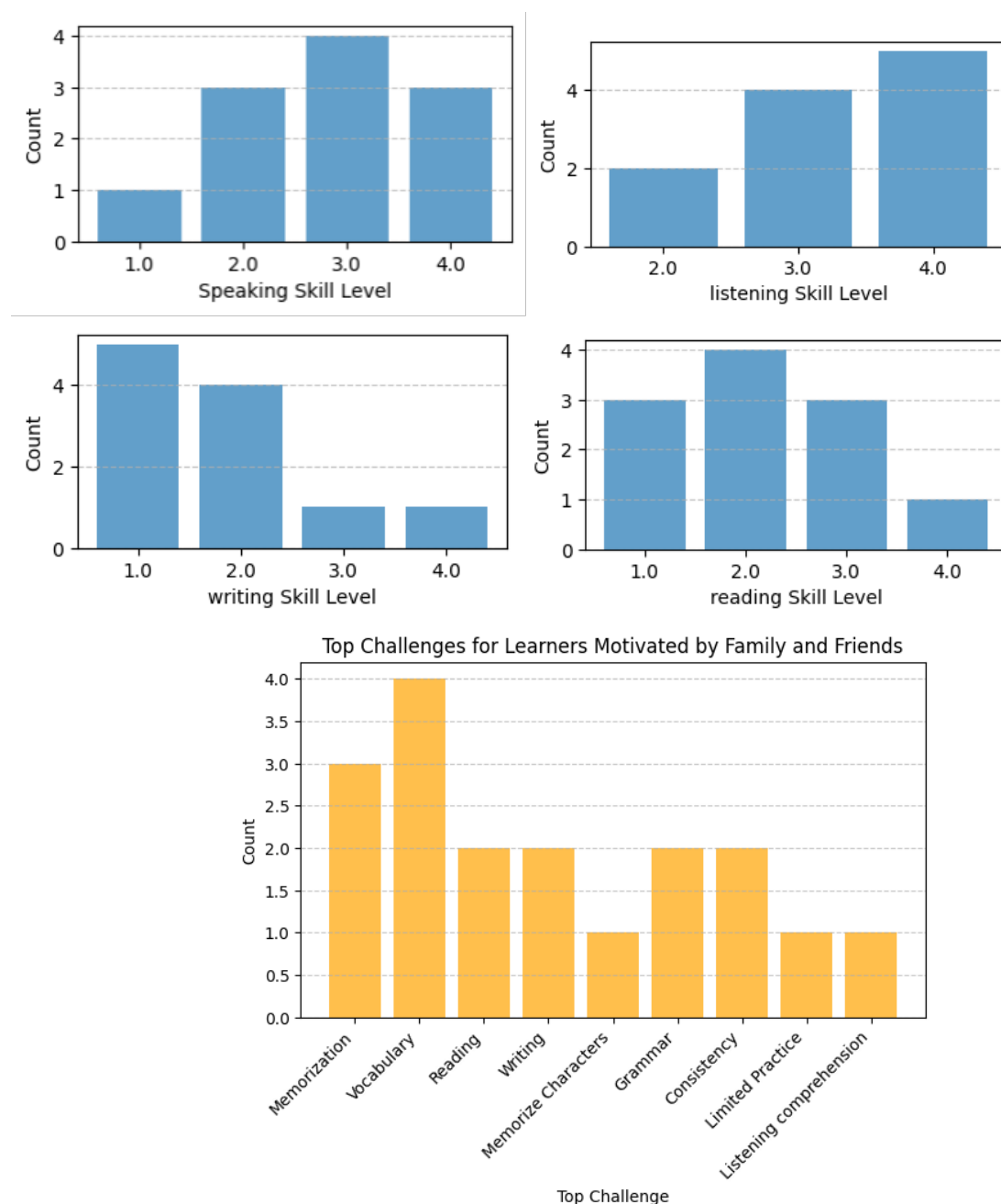
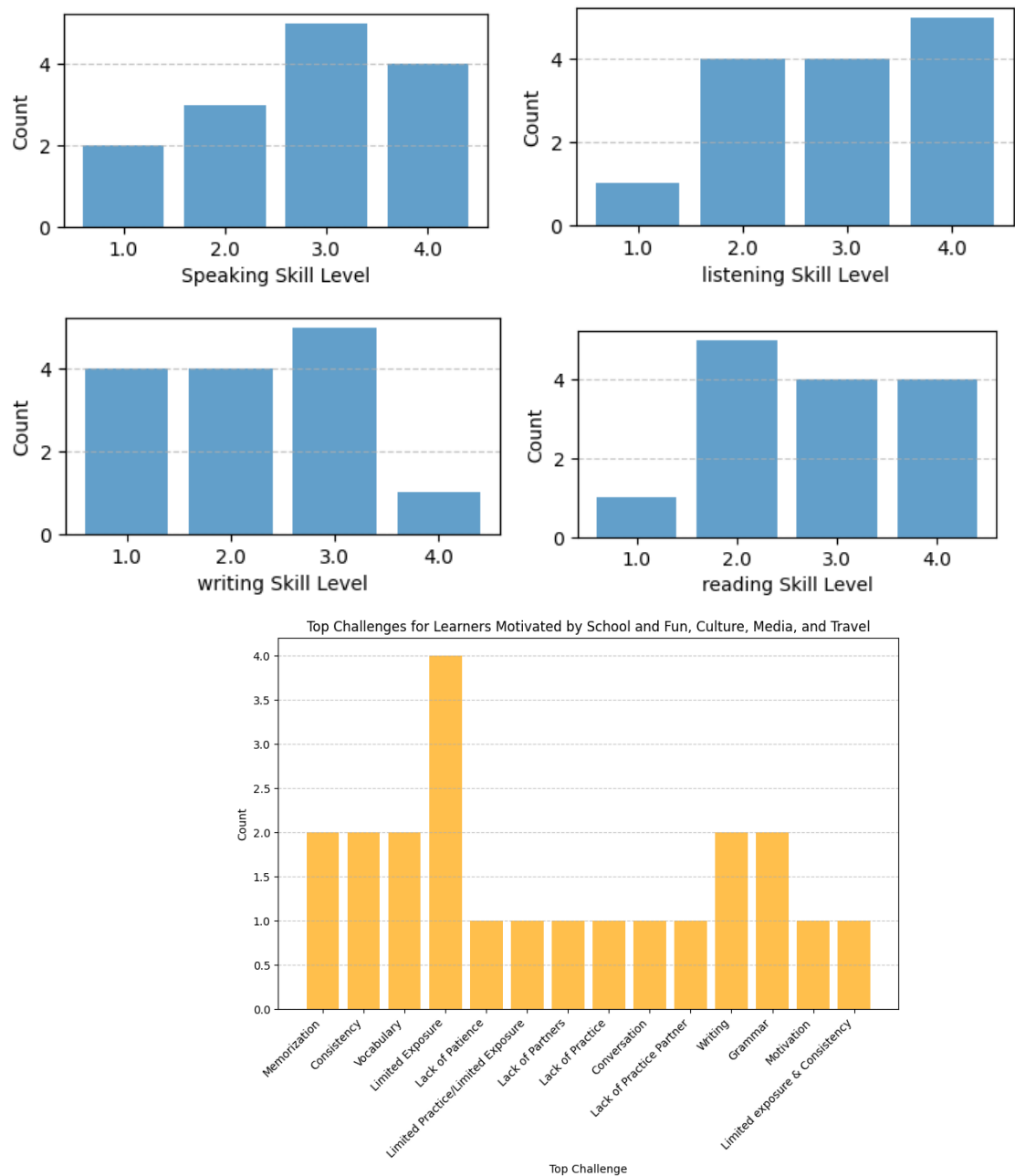


According to our survey results, approximately 70% of heritage speakers demonstrate strong listening and speaking skills, with four respondents indicating proficiency in these areas. However, they tend to struggle more with writing and reading, as noted by seven surveyees who reported lower fluency in these skills. The primary challenges faced by heritage speakers include memorization and vocabulary acquisition. This is particularly evident among those with Chinese heritage, who often can speak and understand spoken Chinese at home or with friends but struggle to recognize written characters due to the difficulty of memorization.



For users who stated their reason for language learning as fun, travel, engaging in foreign media, or learning culture, the percentage of proficiency is more balanced, with around 60% of them rating themselves as having moderate or higher proficiency in speaking, listening, and reading (9/14 for speaking and listening, 8/14 for reading) and 40% rating themselves as moderate or higher in writing (6/14 for writing). Heritage speakers, there is less deviation in percentage of people who rated themselves as having moderate or higher proficiency in the different modalities. We believe this may be due to these users having started learning a language completely from scratch and because they use tools that involve more reading and writing, such as Duolingo. Top challenges mentioned by these users for language learning include limited exposure, consistency in practice, language vocabulary, and writing.



We have also identified a third group of users who cite their career or school as the reason for language learning. These users have the highest percentage of users who rate themselves highly in the modalities, with ~80% (5/6 users) reporting moderate or higher proficiency in speaking, listening, and reading, and ~70% (4/6 users) reporting moderate or higher proficiency in writing. Users in this group cite grammar as their biggest challenge.

