problem of collinearity, it is difficult to handle because it does exist. Wong et al. had considered variables that were closely related to one another (which was supposed to be evaluated by Pearson's correlation coefficients or by clinical judgment) and chose only the most significant one. However, correlations among selected variables cannot be totally avoided. The variance inflation factor can be used to evaluate the extent of collinearity, but selection of independent variables should not depend only on that factor. The criterion of $P < 0.05$ may be too strict for backward selection in this study, since the adjusted R^2 statistics were all less than 0.2. It is suggested that Mallows' Cp statistic be used to choose several acceptable models. If the estimates of parameters vary a lot among different models, clinical rationality as well as the adjusted R^2 should be considered when choosing the best-fitting one.

Yi-Ting Hsieh

Department of Ophthalmology, Buddhist Tzu Chi General Hospital, Taipei Branch, Taipei, Taiwan; the Division of Biostatistics, Graduate Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taipei, Taiwan; and the Department of Ophthalmology, National Taiwan University Hospital, Taipei, Taiwan.
E-mail: ythyth@gmail.com

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Author Response: Model-Fitting Adequacy and Clinical Rationality in Multivariate Linear Regression Analysis

We are grateful for the interest shown by Hsieh in our paper on the distribution and determinants of ocular biometric parameters in the Singapore Malay Eye Study (SIMES).[1] In his letter, he offers his interpretation of the statistical analyses and results of our paper, and we would like to take this opportunity to provide clarification of some of the points that he raises.

His main concern is that the standardized beta (β) coefficients derived from the multivariate adjusted linear regression models of the predictors of different biometric parameters, presented in Table 5 of our original paper, may be erroneous. For example, the standardized β for "Height, cm" of 0.162 for axial length (AL) is interpreted as implying that "when body height increases 10 cm, AL … will increase 1.62 mm." We fully agree that, were this example the case, the results would be implausible. However, we want to point out that such an interpretation is only appropriately applied to the *unstandardized coefficient* or *regression estimate*, typically annotated as *B* in statistical software. In linear regression, the relationship is described by the equation: dependent variable = ($B \times$ predictor) + constant + error term. The *standardized* β *coefficients* presented in our table are the surrogates of Pearson's correlation coefficient and give indications of the relative influences of each predictor on the dependent rather than quantifications of the absolute magnitude of each relationship.

We want to assure Hsieh and all our readers that every effort was made to ensure the greatest validity of the multivariate regression models. As Hsieh has pointed out, overparameterization is unlikely, given the small number of parameters relative to the 2788 observations in our sample. Predictors in the multivariate models were chosen based on biological plausibility and the published literature and were verified with the results of age- and sex-adjusted models before inclusion. Multiple collinearity was determined from the scrutiny of individual Pearson correlation coefficients, residuals, and tolerance measures.

Laurence Shen Lim[1]
Tien Yin Wong[1,2,3]

[1]Singapore Eye Research Institute, Singapore National Eye Centre, Singapore; the [2]Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore; and the [3]Centre for Eye Research Australia, University of Melbourne, Victoria, Australia.
E-mail: ophwty@nus.edu.sg

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Presbyopic Spectacles in Elderly Tanzanians

We enjoyed reading the article by Laviers et al.,[1] describing a methodology, appended to a RAAB (rapid assessment of avoidable blindness) survey, for measuring the prevalence of presbyopia and presbyopic spectacle coverage. The article provides more evidence of the importance of presbyopia as a condition affecting quality of life, even among those who may not read. It was interesting that there was no difference in coverage between males and females.

By simply adding a question asking each participant if he or she owned near-vision spectacles we learned several interesting things during the Kilimanjaro RAAB.[2] Overall spectacle ownership was 10.9% (95% CI, 9.9–11.9), and the men were 1.42 times (95% CI, 1.14–1.76) more likely than the women to have spectacles. Of interest, people 50 to 70 years of age were 1.42 times (95% CI, 1.11–1.81) more likely to have spectacles than those older, independent of presenting visual acuity. Finally, there were significant differences in spectacle ownership among the different clusters making up the RAAB sample, suggesting that availability of spectacles in the village is an important factor. Sex, age, and cluster all remained associated with spectacle ownership in multiple logistic regression ($P = 0.001$, 0.05, and <0.001, respectively). That (independent of visual acuity) the individuals aged 50 to 70 years were more likely to have spectacles than were the older individuals (who presumably need them more) may indicate more demand for good vision and more willingness to pay for it in the younger group. It could also mean that the older people did not have enough money for spectacles.

Spectacle ownership in a population-based group older than age 50 is not exactly the same as presbyopic spectacle coverage in the same group; however, it is a reasonable proxy for coverage, adds nothing to the cost of the RAAB, and provides valuable information for planners.