After reading your response I am actually quite confused about my argument and whether or not it makes sense. In my response to the prompt, I said that in the full model, that b_1 would be biased while in the subset model it wouldn't be biased. In reading your response, my interpretation is that you are saying the opposite. I honestly am not sure which one is correct, as when I first submitted my response, I was quite confident that my answer was coherent. However, after reading your response, I really can't tell if your interpretation makes more sense to me.

I see you also mention p = k + r - 1, I am not sure if you are implying that because the degrees of freedoms there is a difference in bias or variance. Actually, when I said in my discussion that the variance would increase in the full model, I wasn't able to argue it fully. I based it on some math that the textbook seemed to be showing. However, looking at the math it didn't quite make sense what they were saying in the end to me. It could be a typo, or maybe I misunderstood their meaning.

Reading your response has made me aware that my understanding of the material is highly dependent on the textbook's wording. For example, if they say one thing and I interpret it slightly differently, I will have a hard time trying to argue one way or the other. When I read your answer and compare it to mine, I'm not sure which perspective makes more sense to me. I am curious now what the consensus is for our class. I made a response already to a classmate of ours, and at least regarding bias I think that like me, he also concluded that b_1 is more biased in the subset model. Perhaps I am misreading what people are saying though and putting it into some other context.