

September 7, 2004

To: Greg Fowler, Geneforum

From: Adam Davis, Davis, Hibbitts & McCaig, Inc.

Re: Geneforum Survey Questions

I. Introduction

Davis, Hibbitts & Midghall, Inc. (DHM) is pleased to present the results of a statewide telephone survey conducted during August, 2004, to assist Geneforum in assessing public attitudes regarding genetic enhancement. The survey findings will assist Geneforum to assess initial public attitudes toward the emerging issue of genetic enhancement for athletes.

The sample size for the survey was 502. Respondents were age 18 and over and randomly drawn from the state's general population. This memo will highlight key findings and note significant subgroup variations for gender, age, party affiliation, region of residence (tri-county, Willamette Valley, and rest of state), and likely voters. For complete information, please see the accompanying set of data tables.

Statement of Limitations. In gathering the responses, DHM employed quality control measures which included questionnaire pretesting, callbacks, and verification.

Any sampling of opinions or attitudes is subject to a margin of error, which represents the difference between a sample of a given population and the total population (here, Oregon's general population age 18 plus). For a sample size of 502, if the respondents answered a particular question in the proportion of 90% one way and 10% the other, the margin of error would be +/- 2.62%. If they answered 50% each way, the margin would be +/- 4.37%. The reason for the difference lies in the fact that when response categories are relatively even in size, each is numerically smaller and thus slightly less able - on a statistical basis - to approximate the larger population.

These plus-minus error margins represent differences between the sample and total population at a confidence interval, or probability, calculated to be 95%. This means that there is a 95% probability that the sample taken for this study would fall within the stated margins of error if compared with the results achieved from surveying the entire target population.

II. Results

A. Awareness. To sensitize them to the general area of inquiry, respondents were first asked about whether they had heard or read about athletes who resort to banned drugs to improve their athletic performance (Q1). A substantial 81% said yes. Tri-county and rest of state residents said yes more than those in the Willamette Valley. Respondents were more likely to say no or don't know if they were not likely voters.

B. Reaction to genetic enhancement for athletes. Respondents were then asked the following open-ended question (Q2):

“Experts predict that within the next 8-10 years, it will be scientifically possible for athletes to inject genes into their bodies to produce substances to build up their muscles or endurance, a technique that could be hard (perhaps, impossible) to detect. What is your reaction to this possibility considering that genetic enhancement for athletes would be a procedure carried out on adults, or after a child is born?”

By combining like categories, the most-mentioned were:

| Response Grouping | Percent |
|----------------------------------|------------|
| Against it/shouldn't happen | 40% |
| Wrong/unethical/cheating | 14% |
| It's horrible/ghastly/disgusting | 13% |
| All other responses | 4% or less |

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Because this question asked for a respondent’s reaction, the responses reflect a range of opinions on this issue. The top three response categories clearly demonstrate a negative reaction with varying tones. Over a third (40%) were basically against genetic enhancement for athletes, without explanatory comment. The oldest respondents (55+) said they were against it more often than the other age groups, as did republicans compared to democrats, and rest of state compared with tri-county.

Over one in ten respondents (14%) had a reaction that focused on the ethics and fairness of genetic enhancement for athletes, or what we might consider a somewhat measured reaction. Tri-County residents were somewhat more likely to say it is wrong/unethical than residents of the Willamette Valley and rest of state.

About the same number (13%) had a more visceral reaction, using terms like “ghastly” and “disgusting.” Females were more likely to have this reaction than males.

Some of the smaller response categories (at 4% or less) were more neutral in tone. Respondents used terms like “unnecessary,” “personal choice,” “ok for medical reasons,” and “it’s going to happen.” A very small number (2%, n=8) used the term “genetic engineering.”

C. Reaction if genetic enhancement for unborn child. As a follow-up, respondents were asked (Qs3,4,5):

“Would your reaction change if you were the parent making a decision about genetic enhancement for your unborn child to improve athletic performance? Why? Why not?”

There was near consensus at 88% that their reaction would *not* change. There were some subgroup variations, but the percent saying no was high across all demographic groups (ranging from 85% to 94%). Females were more likely to say no than males, as were the oldest

respondents (55+) compared with the two younger groups, residents in the rest of state compared with tri-county and Willamette Valley, and likely voters compared with unlikely voters.

The most-mentioned reasons (open-ended) by those who said their reaction would *not* change (n=443), combining similar response categories, were:

| Response Grouping | Percent |
|---|----------------|
| We should not genetically alter ourselves | 20% |
| Wrong/unethical/unfair/cheating | 15% |
| God creates you the way he wants | 14% |
| Should accept who you are/people are good at different things, no need to alter | 10% |
| Kids should not be on drugs | 9% |
| Unsure of future results | 9% |
| OK for medical reasons, not for physical enhancements | 8% |
| Not natural | 7% |
| All other responses | 3% or less |

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Although many of these responses were grouped into categories similar to those for Question 2, two additional concepts were introduced in the responses to this question. First, a view that we shouldn't change what God has created, and second, a more non-sectarian view that people are fine the way they are.

Among those who said their reaction *would* change (n=45), the most-mentioned reasons (open-ended) were that children should not be engineered (n=8), I have children (n=8), for research (n=6), it would affect me (n=5), and it's risky/could be illegal (n=4).

An analysis of response patterns for Question 2 (reaction to genetic enhancement) and Questions 3,4,& 5 (change if involves unborn child) shows that asking someone about their own child made virtually no difference in how they reacted to the whole issue of genetic enhancement.

III. Conclusion

The survey findings demonstrate a near consensus negative reaction to the concept of genetic enhancement for athletes. Respondents were so definite about their opinions that only a very small percent was in the "don't know/no response" category. Although this is not an issue on the public "radar screen," when introduced they clearly do not like it.

Given the strong negative reaction to genetic enhancement for athletes, we suggest that GeneForum be clear about its objectives before undertaking any additional quantitative or qualitative research.

Future research might build on the most-mentioned reasons among those who had a negative reaction which can best be described in tone and imagery as follows: (1) "flat out" opposition without explanation, (2) concern about ethics and fairness, and (3) a strong, negative, visceral reaction. Respondents included sectarian and non-sectarian views about not changing the way we are when asked about their unborn children.

As for possible sponsors of future research in this general area, Geneforum may want to explore foundations and organizations that focus on ethics and fairness in athletics. Given the recent high profile of drugs and athletics at the 2004 Summer Olympics, the IOC or related organizations may be possibilities, as well as companies that sponsor athletes and athletic events.