

Information Asymmetry & the Sexy Effect: The Example of the Health and Fitness Industry

*Hannah Josepha Rachel Altman¹, Morris Altman²

1 Queensland University of Technology (QUT), School of Economics and Finance & Centre for Behavioural Economics, Society and Technology (BEST)

2 University of Dundee School of Business.

Abstract

Prepared for “The Economics Society of Australian” 2022 Conference in Hobart Tasmania, July 10th-13th 2022.

Sexualized framing can be related to low levels of qualifications among health and fitness (H&F) professionals, and these can have negative effects for health and fitness clients in an unregulated market (related to the Tinder Effect and adverse selection). If individuals choose H&F professionals based on their level of beauty or sexiness, and there is no positive relationship between this and H&F professionals' level of qualification, then there is a greater chance that there will be negative health consequences for clients and negative externalities in terms of overall health costs to society (Altman 2020). The main objective of this paper is to test the hypothesis that there is a positive correlation between highly sexualized framing of H&F professionals' qualifications and their objective level of qualifications. This is what we would expect if clients are rational (make choices which they anticipate will yield improved health outcomes and would follow from a conventional economic prediction). We recognise that clients' motivation for hiring a trainer can be expected to be multi-faceted wherein being beautiful is but one determining variable. But it is important to determine if individuals will choose beauty at the expense of their health and wellbeing measured with regards to injury.

In this paper we also hope to address the question of why rational clients would choose unqualified trainers and follows from the evidence on the sub-optimal choices that are evidenced in this industry wherein consumer choices result in the proliferation of unwanted injuries to clients (Altman 2020).

One of the arguments we make is that clients can and do make poor (unhealthy) choices in a world of bounded rationality, of imperfect, costly and asymmetric information, given unregulated or poorly regulated H&F markets. In such markets, adverse selection problems abound, and sellers can market their wares in an attractive manner without providing robust evidence of appropriate qualifications. Here, in our modelling and experiment, we attempt to control for costly and imperfect information, when analysing why clients choose unqualified H&F professionals on the basis of the perceived beauty and sexiness of trainers.

In effect, we are modelling and empirically testing hypotheses related to how the dependent variable, the choice of H&F professionals, is determined. Key independent variables include the level of beauty or sexiness of the H&F professional, price and cost, and the quality of pertinent information.

We will be conducting a choice experiment in a lab setting, addressing how individuals choose trainers when beauty or sexual framing is a choice variable. A related question is: Is an individual knowingly willing to pay, in terms of negative health outcomes, in order to be trained by a beautiful or sexy trainer? We will use experimental methods to test the hypothesis articulated below. One should note that the lab provides a controlled decision-making environment as opposed to a field experiment (conducted in the real-world-external validity). For our purpose this format is ideal given that we want to address particular questions using survey instruments in an easily controlled environment (in this experiment individuals will not be able to consult with one and another, as they could in a traditional survey experiment). External validity should be achieved by selecting a representative sample. (Boulier & Goldfarb 1998; Diamond & Hausman 1994; Kagel & Roth 1997; List, Sadoff & Wagner 2010; List 2011).

The study will involve lab or online experiment (Covid-contingent) where participants will be asked to make choices on an online platform with respect to this paper's central hypothesis. This data will be used to test our hypothesis. We intend to run this experiment by having participants respond to questions in a controlled virtual lab setting (a virtual room) (Brown 2018). How this experiment is set out and run will in part be dependent on how covid restrictions play out over the next 12 months. We are currently in the process of preparing our ethics application for Queensland University of Technology (QUT) for this lab experiment.

One of the most important aspects of this experiment's design will be for our sample to be a representative one, especially with respect to gender and age groups. We will have multiple sets of questions in this experiment one of which will be addressed without any visual cues. Beauty is in the eye of the client and will be determined or measured by our beauty scale which will help address the question (or control for) how the level of beauty affects one's decisions. In a future experiment we will use visual cues to help address how visual framing affects decision making. The questions asked to the sample population are designed to specifically identify the conditions under which rational clients will choose more or less attractive trainers (related to Internal validity). Econometrically, we will focus on the economic or substantive significance of the independent upon the dependent variable, which is the choice of H&F professionals (Altman 2004; McCloskey and Ziliak 1996).

To summarize, we are going to test the following five hypotheses:

Hypothesis One: When no beauty scale is provided clients will hire the most qualified H&F professional. **Ho:** No Positive correlation between being hired and being high quality. Against **Ha:** Positive correlation between being hired and being high quality.

Hypothesis Two: Clients are more likely to demand the services of a more beautiful (attractive or sexy better choice of words) trainer if they both hold the same level of qualifications (Positive correlation between being hired and beautiful). **Ho:** No Positive correlation between being hired and being beautiful). Against **Ha:** Positive correlation between being hired and being beautiful).

Hypothesis Three: Clients are more likely to demand the services of a more beautiful trainer even if the beautiful trainer is of lower quality (Positive correlation between being hired and being beautiful despite the trainer being lower quality). **Ho:** No Positive correlation between being hired and being beautiful and low quality (the client has asymmetric information regarding the consequences of her/his decision). Against **Ha:** Positive correlation between being hired and being beautiful and low quality (the client has asymmetric information regarding the consequences of her/his decision).

Hypothesis Four: Clients are more likely to demand the services of a more beautiful trainer even if the beautiful trainer is lower quality (Positive correlation between being hired and being beautiful despite the trainer being lower quality where client has perfect information regarding negative consequence). Note the difference between Hypothesis Three and Four is that in Hypothesis Three information is asymmetric whereas in Hypothesis Four information is perfect. **Ho:** (No Positive correlation between being hired and being beautiful despite being lower quality where the client has perfect information regarding the negative consequences of her/his choice). Against **Ha:** (Positive correlation between being hired and being beautiful despite being lower quality where the client has perfect information regarding negative consequence of her/his choice).

Hypothesis Five: Clients are apt to engage the services of a less attractive trainer if this trainer is highly qualified (a positive correlation between being less attractive and the trainers of qualification. **Ho:** There is a positive relationship between the trainer's level of qualification irrespective of her/his level of attractiveness. **Ha:** There is a negative relationship between the trainer's level of qualification and the trainer's level of attractiveness (more qualification and being less attractive are negatively correlated).

As with any experimental economic study, this study will be a de facto case study. However, the results from such economics experiments provide valuable insights into how individuals behave under certain specific (and controlled) conditions and underpins the external validity of economics experiments in general. (Kessler and Vesterlund 2015; Roe and Just 2009).

To conclude the aim of this paper is to test the hypothesis that there is a positive correlation between highly sexualized framing of the health and fitness professionals, qualifications and their objective levels of qualifications using methodology drawn from experimental economics. We hope that this will help us to address the question of why rational clients/ consumers would choose unqualified trainers/ health and fitness professionals that can potentially cause them harm. This is done in the context of individuals choosing their exercise and health professionals when beauty and or sexual framing is a choice variable.

Abstract Word Count 1,398

Select References

Altman, H. (2021). The Tinder Effect in the Health and Fitness Industry (PhD Conformation document).

Altman, M. (2004). Statistical significance, path dependency, and the culture of journal publication. *Journal of Socio-Economics*, 33: 651-663,

Kessler, J. & L. Vesterlund, (2015). The External Validity of Laboratory Experiments: Qualitative Rather Than Quantitative Effects. *Handbook of Experimental Economic Methodology*, <http://dx.doi.org/10.1093/acprof:oso/9780195328325.003.0020>.

List, J., S. Sadoff, & M. Wagner (2010). So You Want to Run an Experiment, Now What? Some Simple Rules of Thumb for Optimal Experimental Design, NBER Working Paper No. 15701. Accessed March 15, 2021, at: <http://www.nber.org/papers/w15701.pdf>.

McCloskey, D. & S. . Ziliak. 1996. The Standard Error of Regressions. Journal of Economic Literature,34: 97-114.

Key Words

Behavioural Economics, Asymmetric Information, Beauty, Signalling, Sexiness, Marketing, Social Media, Personal Training, Fitness Professional, Health and Fitness Industry, Injuries, Labour Market, Economic Phycology