Client Heart Rate Analysis Associated with Genetic Counseling Practice

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Introduction: Kessler (1997) presented the educational and counseling models as two professional approaches to genetic counseling practice. Inherent in each model is a distinct manner of communicating with clients. The teaching model is aligned with a goal-directed approach of presenting information and interpretations of genetic events; whereas the counseling model is client-centered and thus aligned with the client’s needs. Little is known about how these two approaches affect client reactions. The theory of emotional expression would suggest that the counseling approach allows clients to freely express their emotional concerns about their increased likelihood of getting cancer. Whereas, the same theory would posit that the teaching model prevents client openness which may result in feelings of emotional inhibition. The present pilot study assesses for a physiologic correlate (i.e., heart rate) of emotional inhibition.

Procedure/Methods: Undergraduate volunteers viewed 2 videotaped, 5 minute genetic counseling segments (education vs. counseling). Their heart rate (HR) was recorded before, during and after viewing each segment. Participants also completed questionnaires.

Results: Sixty-six undergraduates volunteered for this ongoing study (38 = females; 28 = males). Their mean age was 22.3 years (SD = 5.6). They were predominantly single (81.8%) and Caucasian (75.8%). Results from an ANCOVA, controlling for baseline HR indicated that participants did not vary in their average HR response to the education vs. counseling scenarios (M = 75.17, SD = 10.50 vs. M = 74.32, SD = 10.19; f(1, 58) = .70, p = .41).

Summary: These preliminary findings did not support client HR variations in response to the two primary genetic counseling models of practice. However, in the larger parent project, we may find significant differences in client skin conductance associated with the two practice approaches, thus supporting the notion of emotional inhibition in provider-client interactions.