**Job Description**

**Job Title:** ITC Programming Analyst  
**Department:** Psychology - ITC  
**Reports To:** ITC Administrative Manager  
**Jobs Reporting:** N/A  
**Salary Grade:** USG 8  
**Effective Date:** June 2019

**Primary Purpose**
To program, test, and implement telephone and web-based surveys; Provide and maintain data access for ITC Project datasets; Maintain, clean, develop, and analyze ITC data subsets.

**Key Accountabilities**

### Programming and implementation of telephone and online surveys
- Under the guidance of the Survey Manager and Project Managers, program and troubleshoot both simple and complex telephone and web-based surveys, using various software packages (e.g. Acuity 4 by Voxco, CI3 for windows WinCati Software, SensusWeb, etc.).
- Clean and modify programmed survey datasets as required to correspond with ITC survey specifications and documentation.
- Develop a high degree of familiarity with ITC’s surveys and their complex skip patterns.
- Work with Research Associates and Research Scientists for ITC Project Management to ensure that sample quotas are appropriately specified and met.
- Interact with external software service providers to ensure ITC’s programming needs are met by appropriate survey-programming software.
- Initiate contact with software service providers to troubleshoot and resolve complex programming issues and to upgrade survey-programming software versions as necessary.
- Collaborate with the ITC Survey Management Group and the Survey Research Centre to coordinate survey hosting and ensure that ITC survey programming and implementation are complete and accurate.

### Dataset Management
- Maintain records of ITC dataset releases and updates.
- Notify ITC investigators and data users of dataset releases and dataset updates; set appropriate permissions on posted datasets; ensure that, when datasets are released, the corresponding Fieldwork Surveys and Dataset Release Notes are posted by other ITC staff.
- Under the guidance of the ITC Managing Director and Senior Research Scientist, process data requests from investigators and other data users; maintain electronic records of data usage permissions.
- Liaise regularly with the Data Management Core group and the ITC Managing Director and Senior Research Scientist.

### Development and Maintenance of Datasets:
- Implement quality control processes for datasets, via cleaning and processing data – e.g. validate data entry; check data against survey documentation; check for out-of-range and extreme data values; collaborate with the Survey Management Group to appropriately label
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- datasets and to ensure that variable names are correct; derive ITC standardized variables; document data cleaning code for others’ reference.
- Identify, investigate and resolve data anomalies and discrepancies.
- Develop and implement standard operating procedures to create, organize, store, document, extract/export, convert, merge and manipulate large and small data files.
- In collaboration with the Data Analysts, prepare customized data subsets for ITC investigators and other data users, using SAS, SPSS, and Stata.

### Project Consultation and Design
- Provide consultation for staff and investigators regarding survey programming, data management and data reporting.

### Time Management and Prioritization:
- Manage multiple and competing priorities related to programming and data needs for the ITC Project and other small research projects involving various investigators and staff.
- Resolve and/or escalate problems as needed.

### Teamwork
- Participate in project and team meetings to provide input on survey programming as required.
- Ensure accuracy of programming, data access, and datasets.

### Communication:
- Communicate with external stakeholders and internal project collaborators.
- Respond to ad hoc and routine inquiries for small and/or more complex projects.

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*All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

### Required Qualifications

**Education**
- Bachelor’s degree in Computer Science or a related field, with strong emphasis on programming/software development.

**Experience**
- Experience in survey research and survey programming is essential.
- Extensive experience with Acuity 4 (by Voxco) is essential.
- Experience with statistical methods and scientific theories and principles is an asset.
- Experience with SAS is required; experience with R, SPSS, and Stata is an asset.

**Knowledge/Skills/Abilities**
- Familiarity with health or psychology research in general, and especially tobacco research, is an asset.
- Familiarity with health behaviour or social science research designs and methods of data analysis is preferred.
- Proficiency in managing competing priorities and time demands from multiple sources is required.
- Knowledge of other statistical packages (e.g., SPSS and/or Stata and/or R).
- Ability to acquire and use new technologies and techniques.
- Ability to multi-task and to work quickly and efficiently under pressure.
- Ability to stay focused on a task in a busy workplace.
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- Ability to maintain a creative and positive approach to programming requests and support under tight timelines; ability to prioritize in responding to ad hoc and routine data inquiries.
- Strong organizational and communication skills.
- Strong computer skills, particularly with Microsoft Word, Microsoft Access, and SQL.
- Strong analytical and problem solving skills, resourcefulness.
- Ability to be meticulous and detail-oriented.
- Ability to work independently as well as part of a team.

Nature and Scope

- **Contacts:** Internally, communicates with all survey management, data management and ITC project team members in all groups and departments, to provide consultation, guidance, and results of programming and data management. Externally, communicates with survey firm technical staff.
- **Level of Responsibility:** The position is responsible for programming ITC surveys; providing and maintaining ITC data access; and completing ITC data subset requests.
- **Decision-Making Authority:** Responsible for consulting with ITC Survey Management leadership, ITC Data Management leadership, and ITC Principal Investigator to determine best approaches to survey programming and to provide insight and guidance to all project team members.
- **Physical and Sensory Demands:** Minimal demands typical of a programmer and analyst within a team-oriented and multi-project office environment. Time spent at an ergonomically appropriate work station with suitable computer equipment and accessories. There are deadline pressures and demands for thoroughness and accuracy. Extended hours are occasionally required.
- **Working Environment:** Minimal exposure to stressful conditions typical of a programmer position. Position has leadership support for prioritization of workload over multiple projects. Meetings and interactions with co-workers occur frequently.