

**Crafting Precise Personas: An Application of Q Methodological Research**

**Maggie Elliot**  
Graduate Assistant  
Texas Tech University  
Margaret.Elliot@ttu.edu

**Dr. Courtney Meyers**  
Associate Professor  
Texas Tech University  
Courtney.Meyers@ttu.edu

Department of Agricultural Education and Communications  
Box 42131  
Lubbock, TX 79409  
806-742-2816

## **Crafting Precise Personas: An Application of Q Methodological Research**

### **Introduction/Need for Innovation**

Adapting each message to a target audience will foster maximum communication efficiency because personalizing the message to the personal beliefs and opinions enhances the relevance of the subject (Hawkins & Fackrell, 2008). Persona development is a common strategy used to distinguish key stakeholder entities for marketing purposes. Personas are detailed archetypal characters that represent distinct groups of behaviors, goals, and motivations observed and identified through the research process (Guo & Ma, 2018). The completion of personas requires an insightful perspective into the psychographics of individuals. Market research conducted to inform personas, such as the administration of focus groups or the examination of online web browsing habits, is time-intensive and expensive (Dion & Arnould, 2015). Q methodology provides another technique to develop audience personas. Q methodology is a research approach grounded in the study of human subjectivity, a concept embodying how an individual's personal opinions and feelings shape one's judgements. At its core, the technique seeks to unveil patterns and viewpoints held by specific audiences (Watts & Stenner, 2012).

The rich descriptions detailing the priorities of participants grant this method as a promising avenue for communicators to accurately capture the inherent viewpoints of defined audience groups and build credible personas. Q methodology combines qualitative aspects of research in the examination of subjective human experiences and perspectives (Brown, 1993), but also integrates the quantitative tools of correlation and factor analysis to yield persona groupings (Simons, 2013). As agricultural communicators seek empirically rigorous methods to understand perceptions, Q methodology offers a means to “capture subjectivity – reliably, scientifically, and experimentally” (Watts & Stenner, 2012, p. 26). Q methodology's application to marketing and communications is a relatively novel endeavor, particularly in agricultural communications (Leggette & Redwine, 2016). To help others develop personas with empirical support, this poster provides insights gained from conducting Q methodology studies to develop precise personas.

### **How It Works/Methodology/Steps**

In this research approach, data collection is comprised of a series of “Q sorts” in which participants physically rank statements printed on cards according to their level of agreement. These rankings are then analyzed to capture statistically similar groupings (Watts & Stenner, 2012). Researchers develop a comprehensive account of constructs encompassing the perceptions, beliefs of a topic known as the concourse. The statements should be broadly representative of the opinion domain and resist from exercising bias toward a particular viewpoint. Additionally, the concourse should embody diverse perspectives and be informed by qualitative methods or relevant literature (Watts & Stenner, 2012). Watts and Stenner (2012) recommended using a 40-80 statement Q set to enable adequate coverage and balance of the concept. In regard to the number of participants, Kline (1994) suggested a minimum ratio of two participants to every study variable, or twice as many Q set statements as participants. Pre-sort questionnaires and post-sort interviews are recommended to potentially add to the richness of the study, and “confirm and corroborate the tone of particular interpretations (p. 75). A unique number is attributed to each statement, and the ranking order data is recorded according to each column's distribution (Watts & Stenner, 2012.)

Data analysis is conducted using PQ Method Software, a package designed specifically for Q Methodology (Schmolk, 2014). Researchers first apply a Principal Component Analysis (PCA) to generate an unrotated factor matrix. The Kaiser-Guttman Criterion will serve as a guide to determine an appropriate factor extraction. All factors with an Eigenvalue greater than 1.0 are considered as defining sorts, following Watts and Stenner's (2012) recommendations to use values in determining workable and meaningful solutions. Lastly, a varimax rotation is applied to generate a rotated factor matrix and select defining sorts for a characterization of viewpoints.

### **Results To Date/Implications**

One of the current authors has conducted two studies using Q methodology. One study was to better understand preferences of natural food retailer patrons (Smith, Elliot, & Redwine, 2018) while the other was an examination of cotton growers' perceptions about sustainable textile production. The data from these completed Q methodology studies were used to develop precise personas to represent various audience segments. The ability to develop personas truly reflective of key audience segments can inform strategic communication efforts and ensure messages are salient. The holistic viewpoint of an individual Q methodology helps discover acts as powerful information for agricultural communication practitioners to craft precisely accurate personas.

### **Future Plans/Advice To Others**

The personas uncovered using Q sort can then be used to inform message development and testing endeavors. In regard to the results from the Q sort study with cotton farmers, we plan to use the personas to create and deliver targeted messaging that will influence changes in attitudes and behaviors related to sustainable textile production.

The design of a Q sort requires careful attention to the concourse, a fundamental component of the methodology, and steps should be taken to confirm the legitimacy of the statements. The concourse should be reviewed by subject matter experts to "clarify wording of items, reduce duplication, generate new items, and ensure that the Q set provides adequate coverage of the relevant ground" (Watts & Stenner, 2012, p. 61). Additionally, conducting a pilot test with participants similar to the study's target population serves as an important way to refine the wording of statements. Q methodology researchers have cautioned against using too many statements, which can make the sorting process overly demanding and taxing for participants (Curt, 1994). Scheduling adequate time for participants to thoughtfully complete the pre-sort questionnaire, conduct the Q sort, and engage in the post-sort interview is an important component to assuring the quality of data. While the time necessary is largely dependent on the concourse and individual, 20-30 minutes is recommended per participant.

### **Cost/Resources Needed**

Q sorts can be conducted a number of ways, from arranging statements into the distribution on the floor to creating a board specifically for the purpose. A 2'x3' whiteboard with magnetized statements is a portable option that affords enough space for participants to complete the instrument. Some budget may be necessary to incentivize participants to thoughtfully participate in the study. The data analysis software designed specifically for Q methodology, PQ Method is free and available online.

## References

- Beason, L. (1991). Strategies for establishing an effective persona: An analysis of appeals to ethos in business speeches. *The Journal of Business Communication*, 28(4), 326–346. doi:10.1177/002194369102800403
- Brown, S.R. (1993). A primer on Q methodology. *Operant Subjectivity*, 16(3), 91-138.
- Curt, B. C. (1994). *Textuality and tectonics: Troubling social and psychological science*. Maidenhead, BRK, England: Open University Press.
- Dion, D., & Arnould, E. (2015). Persona-fied brands: Managing branded persons through persona. *Journal of Marketing Management*, 32(1-2), 121-148. doi:10.1080/0267257x.2015.1096818
- Guo, A., & Ma, J. (2018). Archetype-Based Modeling of Persona for Comprehensive Personality Computing from Personal Big Data. *Sensors*, 18(3), 684. doi:10.3390/s18030684
- Hawkins, A. J., & Fackrell, T. A. (2010). Does Relationship and Marriage Education for Lower-Income Couples Work? A Meta-Analytic Study of Emerging Research. *Journal of Couple & Relationship Therapy*, 9(2), 181-191. doi:10.1080/15332691003694927
- Leggette, H. R., & Redwine, T. (2016). Using Q methodology in agricultural communications research: A philosophical study. *Journal of Applied Communications*, 100(3), 57-67.
- Schmolck, P. (2014). *PQMethod manual*. Retrieved from <http://schmolck.userweb.mwn.de/qmethod/pqmanual.htm>. Accessed on January 14, 2018.
- Simons, J. (2013). An introduction to Q methodology. *Nurse Researcher*, 20(3), 2-32.
- Smith, K., Elliot, M., & Redwine, T. (2018). Hunger Games: Using Q Method to Define Food Perspectives of Stakeholders at a Natural Food Retailer. In *American Association for Agricultural Education Proceedings of the Annual National Research Conference* (Vol. 45, pp. 409–422). Charleston, SC: American Association for Agricultural Education.
- Watts, S., & Stenner, P. (2012). *Doing Q methodological research*. Thousand Oaks, CA: Sage Publications, Inc.