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from survey tions to get at example, Ofir po, Petty, and to which the f questions is that a higher ion matrix is

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mplify the diographic data. sources, Inc., at they use to f background each member me cases even ries, and even create a cusat nonetheless set. Electronic etailed picture e information TABLE 4.1 Eighteen items used in measuring a survey respondent's "need for cognition"

Item Response

 C_2

 C_3

 C_4

 C_5

 C_6

 C_7

 C_8

 C_9

 C_{10}

 C_{11}

 C_{12}

 C_{13}

- C_1 I prefer complex to simple problems.
 - I like to have the responsibility of handling a situation that requires a lot of thinking.
 - Thinking is not my idea of fun. (R)
 - I would rather do something requiring little thought than something that is sure to challenge my thinking abilities. (R)
 - I try to anticipate and avoid situations where there is a likely chance that I will have to think in depth about something. (R)
 - I find satisfaction in deliberating hard for long hours.
 - I only think as hard as I have to. (R)
 - I prefer to think about small daily projects to long-term ones. (R)
 - I like tasks that require little thought once I've learned them. (R)
 - The idea of relying on thought to make my way to the top appeals to me.
 - I really enjoy a task that involves coming up with new solutions to problems.
 - Learning new ways to think doesn't excite me much. (R)
 - I prefer my life to be filled with puzzles that I must solve.
- C_{14} The notion of thinking abstractly is appealing to me.
- C_{15} I prefer tasks that are intellectual, difficult, and important to ones that do not require much thought.
- C_{16} I feel relief rather than satisfaction after completing a task that required a lot of mental effort. (R)
- C_{17} It's enough for me that something gets the job done; I don't care how or why it works. (R)
- C_{18} I usually end up deliberating about issues even when they do not affect me personally.

(R) indicates a reverse-coded item. Source: Cacioppo, Petty, and Kao (1984).

technol is another area that is "ripe" for the simplification afforded by principal components.

Identifying patterns of association among variables. In addition to reducing dimensionality, principal components analysis is also useful for gaining insight into patterns of association. It is often difficult just by inspection of a large correlation matrix to identify the variables that "go together" by virtue of a high degree of mutual covariation. That task is greatly simplified by looking at the relationship between the