

## EMOTIONAL “DEAD FISH” AS IMPEDIMENTS TO ORGANIZATIONAL LEARNING

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### ABSTRACT

Nonaka and Takeuchi’s (1995) model of organizational learning emphasizes the need for face-to-face communication to establish a channel for tacit-to-tacit knowledge exchange between individuals. Within any organization, new concepts are imparted during these tacit exchanges. This paper explores the relevance of emotional unawareness on learning by examining the association between alexithymia and undergraduate computing and business students’ GPA. Alexithymia is a personality construct where individuals have difficulty identifying feelings, have difficulty describing feelings, have an externally-oriented thinking style, and have a diminished fantasy life. The paper discusses the etiology and characteristics of alexithymia and particularly those characteristics as they relate to interpersonal communication. These preliminary findings suggest that alexithymia inhibits academic success as indicated by GPA. The paper concludes with a discussion of future research.

Key words: Empathy, Alexithymia, and Organizational Learning

### 1 INTRODUCTION

Nonaka and Takeuchi (1995:238) criticize the mind-body duality of the Cartesian model of knowledge and assert that their model of organizational learning places a “strong emphasis on the importance of bodily experience ... the most powerful learning comes from bodily experience.” Damasio (1994) points out, in his aptly titled book *Descartes’ Error*, that bodily experience, emotion, and cognition are intertwined. As social beings, humans connect with each other through the universal emotions of empathy, sympathy, and compassion (Oatly, 2004). Empathy, Levenson and Ruef (1992: 234) assert, “is a fundamental part of the social fabric of emotion, providing a bridge between the feelings of one person and those of another. Without accurate perception of another’s feelings, it would be difficult to feel what others feel or to respond compassionately to their plight.”

However, most contemporary implementations of knowledge systems continue to maintain the Cartesian duality by emphasizing the explicit and codifiable aspects of learning (Mingers, 2001; Nonaka, Toyama, and Konno, 2000). Tacit knowledge, in contrast to explicit knowledge — the other form of knowledge, is only transferred to another through face-to-face communication where the proximity allows for the transfer of feelings, emotions, mental models and experiences between individuals (Nonaka and Konno, 1998).

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Since it is within the context of the interpersonal and proximal relationship that the organizational knowledge creation process begins, an effective learning process requires each party in the relationship to empathize with the other (Nonaka and Konno, 1998). This is consistent with the Darwinian evolutionary perspective that emotion is necessary to inform another of one’s bodily state or feelings (Reis, Collins, and Berscheid, 2000) in addition to emotion’s role to prepare our bodies to quickly react to positive or negative stimuli.

Krystal (1988: 242) observes that “the assumption that other people’s emotional responses are like our own is the basis of empathy and as such is basic to all human intercourse.” This suggests each person has a mental schema that allows at least a cognitive assessment of others’ thoughts and feelings. Relatedly, neuroscientists have found that there is a brain region that contains “mirror neurons.” (de Vignemont and Singer, 2006). When a person either experiences an emotion or sees another’s emotion, the mirror neurons automatically activate. de Vignemont and Singer (2006:435) posit that mirror neurons allow us to “feel the emotions of others as if they were our own.” Therefore, two mechanisms provide a pathway to inform a person about emotions. The first pathway via mirror neurons is innate and provides fast and unconscious bodily sensations to inform a person about their emotional state and the state of others; the second is a slower and conscious cognitive process.

Given the widely shared assumption that everyone has both the brain functionality and the schema to be empathic, this research examines an individual difference factor, alexithymia, and how it influences the organizational learning process. Two consequences of a lack of emotion are: (1) the inability to express emotionally related notions to others, and (2) the inability to understand others’ emotions (i.e., empathize with others). This paper demonstrates the relevance of emotional unawareness on learning by examining the association between alexithymia and undergraduate computing and business students’ GPA.

## **2 EMPATHY AND ORGANIZATIONAL LEARNING**

Various models of organizational learning are available but this research uses Nonaka and Takeuchi’s (1995) four-stage model of organizational learning. The section’s discussion begins with a summary of the model and concludes with a discussion of two empathy-related processes that may inhibit learning.

### **2.1 The SECI model of organizational learning**

Briefly, Nonaka and Takeuchi’s (1995) model of organizational learning includes: (1) a *socialization* phase to provide tacit-to-tacit knowledge transfer between individuals via empathy; (2) an *externalization* phase to convert from tacit to explicit knowledge via articulation; (3) a *combination* phase that provides for explicit-to-explicit knowledge transfer to organizational systems via processing and editing; and, (4) an *internalization* phase where individuals embody tacit knowledge via activities such as learning-by-doing. The first letters of each phase are the basis of the SECI acronym often used to label this model.

Since the SECI model recognizes the influence of organizational culture and imperatives, the model posits that establishing an environment or context for learning is necessary; Nonaka and Konno (1998) call this context *ba*. Nonaka and Konno (1998:40-1) assert that “*ba* can be thought of as a shared space for emerging relationships,” and “knowledge resides in *ba*” since this physical, virtual, or mental space provides the foundation for knowledge creation.

Four types of *ba* exist to support each phase of the SECI model (Nonaka and Konno (1998:46). *Originating ba* in the socialization phase provides a venue for individuals to engage in face-to-face interchanges that allow for tacitly shared feelings and emotions. *Interacting ba* provides for making tacit knowledge explicit in the externalization phase through dialog involving metaphors and stories. *Cyber ba* is a further expansion of explicit knowledge to the organization that involves logic and, possibly, application of information technology for dissemination in the combination phase of knowledge creation. Finally, *exercising ba* is an action-based learning, including on-the-job training and participation, that is necessary for individuals to internalize explicit knowledge. This paper primarily concerns itself with the socialization phase that requires *originating ba* to begin the knowledge creation process.

## 2.2 Inhibiting socialization and originating *ba*

Within Nonaka and Takeuchi’s (1995) SECI model of organizational knowledge creation, the socialization phase requires empathy to start the knowledge creation process. Empathy provides the conduit for mutual understanding and formation of shared mental models; that is, empathy is necessary to achieve “fusion” of the tacit knowledge between individuals (Nonaka and Takeuchi, 1995:92). Further, to enhance our tacit knowledge of others, we must engage our capacity for “active empathy” (von Krogh, 1998:137). Active empathy requires us to be proactive to discover another’s needs, interests, and emotions.

While top management must provide and nurture all forms of *ba* to have an effective learning process (Nonaka and Konno, 1998), some organizations see emotions as either a hindrance or a resource to manage (Domagalski, 1999). In either case, the organization’s management may establish emotion display rules and feeling rules for its members to follow. On one hand, emotion display rules may require, for example, employees to “smile” when greeting clients. Yet, other imperatives may suggest the need to “feel what the client feels.” Seen in this way, emotion is a factor of production to manage.

Conversely, while empathy is a necessary component of effective interpersonal communication, organizational “feeling rules” may demand that individuals suppress the expression of genuine emotion (von Krogh, 1998); inhibiting emotions is thought to promote rational organizational processes. Antonacopoulou and Gabriel (2001:445) observe that in certain organizations with emotional display rules, some individuals can act alexithymic by “denying all emotional experience or conflict and displaying a robot-like adherence to organizational routines which make them immune to any learning.” While feeling or display rules can sanction emotions, people also may differ in their ability to express or appraise emotions (George, 2000). Alexithymia, the inability to understand or express emotions, is the central focus of this paper. The next section discusses the etiology, symptoms, population prevalence, and outcomes of alexithymia — an individual difference

factor that can inhibit emotional expression and, consequently, inhibit organizational learning processes.

### 3 ALEXITHYMIA

“Alexithymia” is a term coined by Sifneos (1972) and literally means “no words for emotions.” It is a personality construct where individuals have difficulty identifying feelings, have difficulty describing feelings, have an externally-oriented thinking style, and have a diminished fantasy life (Taylor and Bagby; 2000). This phenomenon was initially thought to be a communications dysfunction but it is now seen as a deficit in processing emotional signals. The deficit may be the outcome of neurological damage, inhibited early social developmental, or psychological trauma (Taylor and Bagby; 2000). As a consequence, emotional processing and cognitive processes interact to inhibit one another to varying degrees (Bermond, Vorst, and Moormann, 2006). Alexithymia population levels follow a normal distribution (Taylor and Bagby; 2000). It is a relatively stable trait but gender and national, organizational, and professional cultures may promote and sustain alexithymic-like behavior (Taylor and Bagby, 2000). More importantly, alexithymia is neither a mental disorder nor a learning.

Alexithymics’ impact can have potentially debilitating effects on organizations and the knowledge creation process since they (Kets de Vries, 1999:1286-7):

- neither show nor feel passion – “no fire in their belly”
- speak in a lifeless, dull, factual, detail-oriented style
- frustrate others because of their dullness and lifelessness
- remain “unperturbed by what other people would find emotionally shattering experiences” and
- lack spontaneity --- “they have no sense of fun.”

Consequently, Kets de Vries (1999:1388) observes that interaction with, what he labels “dead fish” personalities, “has a draining quality; there is so little emotional resonance that we may wonder whether there is anybody home. ... These people can be extremely exhausting because of their lifelessness.” The remainder of this section examines the population prevalence of alexithymia and the impact of alexithymia on interpersonal communication.

#### 3.1 The population prevalence of alexithymia

Kets de Vries (1999), using his clinical judgment, reports that 30% of the 200 executives he interviewed were alexithymic or alexithymic in combination with the related conditions of anhedonia (i.e., limited ability to experience pleasure) or depersonalization (i.e., a detachment from one’s physical or mental self) or both. While his approach may overstate the prevalence of alexithymia in the executive management ranks by including anhedonia and depersonalization, he relates his observations to a population prevalence of 8.2% for males and 1.8% for females. Assuming an even split of males and females within the population the overall incidence would be around five percent; Kets de Vries’s executive incidence is six times the population average. However, the next paragraph summarizes research that indicates the population proportion may be much higher than 5.0%.

Kets de Vries's (1999) estimate of the population prevalence is from the research of Blanchard, Arena, and Pallmeyer (1981) who used the Schalling-Sifneos Scale to classify the alexithymia in 230 normal (i.e., non-clinical) undergraduates. Since the publication of the Blanchard, Arena, and Pallmeyer article, various versions of the Toronto Alexithymia Scale (TAS; Parker, Taylor, and Bagby, 2003) have been introduced, validated, and used in over 1000 studies (Lumley, 2004). A TAS-20 score of 61 or greater is the clinical threshold for a “high” alexithymic score. The weighted average of four North American studies indicates 11.1% of the non-clinical population is highly alexithymic (Parker et al., 2005; Kerr et al., 2004; Lane et al., 2000; and Bauermann et al., 2002). Typically, studies do not report the proportion of moderate alexithymia (i.e., TAS-20 scores  $\geq 51$  and  $\leq 61$ ) but Lane et al. (2000), in a US community study (n=379), found a total of 31.7% of the subjects were alexithymic; 13.2% of the subjects were high alexithymics and an additional 18.5% were moderate alexithymics. Also, Parker, et al. (2005) report that 72.4% of an undergraduate sample (n=707) score as non-alexithymic while 10.9% score as high alexithymic which implies an additional 16.7% of the subjects were moderately alexithymic. Consistent with Kets de Vries's observations about the executive prevalence, these studies suggest that about one-third of the general population is moderately to highly alexithymic.

Since alexithymia is distributed within the population and approximately one-in-three individuals are alexithymic, organizations will experience the following consequences because of interactions with alexithymic employees, customers, or other stakeholders:

- A reduction of productivity and communication effectiveness.
- A reduced commitment to organizational goals.
- A reduced level of creativity related to a diminished fantasy life.

These organizational phenomenon would potentially inhibit learning processes and, as the next section discusses, building relationships with alexithymics is exceedingly difficult.

### **3.2 Alexithymia's impact on relationships**

A primary consequence of alexithymia is that it inhibits interpersonal relationships (Spitzer, Siebel-Jürges, Barnow, Grabe, and Freyberger, 2005). Early research recognized it reduces the effectiveness of interpersonal communication — the evolutionary explanation for the development of human emotions. Vanhuele, et al. (2007:110) describe their relationships as having “a tendency toward social conformity and conflict avoidance, and they tend to approach others in an unempathetic, cold, or detached way. ... [They] avoid close social relationships, and if they do relate to others, they tend to position themselves as either dependent or impersonal, such that the relationship remains superficial.” Consequently, because of problems understanding or empathizing with others' emotions, alexithymics find it difficult to establish long-term relationships and have problems maintaining relationships. Their empathy impairment also may be the basis of alexithymia's negative correlation with emotional intelligence (Goleman, 1995; Taylor and Bagby, 2000).

In sharp contrast to the preceding description of alexithymics, alexithymics also can be skilled social actors (Wastell and Taylor, 2002). Since alexithymics' cognitive processes are functional, they may be able to comprehend and apply explicit social processes (i.e., social rules and feeling rules) while still having a very limited capacity to form close relationships that demand a tacit understanding that demands empathy. Thus, they exhibit

“pseudonormality.” (Taylor, 1987) Moreover, since alexithymics only cognitively comprehend relationships, they may view any relationship to be as good as any other; that is, relationships are utilitarian and interchangeable. Kets de Vries (1999) argues that this lack of tacit emotional understanding may attract alexithymics to certain roles (e.g., information technology) or to certain types of organizations (e.g., bureaucratic). He (Kets de Vries, 1999) also posits alexithymic executives can create alexithymic organizations.

Since a relatively high proportion of the general population is thought to be alexithymic and, consequently, unable to effectively use empathy in relationships, this paper’s major proposition is that higher levels of alexithymia will be associated with decreased learning within an organizational context.

#### **4 EXPLORING THE PROPOSITION**

Following the approaches that the organization learning literature emphasizes for commercial, government, or military enterprises, higher education institutions also are being characterized as learning organizations (Patterson, 1999). This exploratory research uses undergraduate business students as a proxy for business professionals. This section begins with a discussion of various features of business disciplines that shape the culture of business education and tie it to the organizational world. The remaining sections describe the methodology and results.

##### **4.1 Characteristics of business studies.**

Most college students are aspiring professionals and business students are no exception. Business students function within a higher education organizational context, gain knowledge through reflection and interactions with others, and their performance is partially evidenced by grades. However, colleges and universities are not homogeneous organizations; the academic disciplines that comprise the institution have very different practices regarding socialization and development of affective characteristics (Smart, Feldman, and Ethington, 2000). Neumann, Parry, and Becher (2002) discuss consequences of the disciplinary focus in several areas including curriculum, grading, faculty characteristics, cognitive goals, teaching methods, and the tacit expectations.

Business studies are characterized as applied disciplines that develop vocational competencies. Also, business studies stress development of the more qualitative and pragmatic aspects of knowledge. Neumann, Parry, and Becher (2002:410) assert that “a prominent place is given to the development of reflective practice and lifelong learning skills.” Consequently, the assessment of students’ performance (i.e., grades) is an exercise in determining the degree of match between the learners’ mental models and those of the faculty. A further implicit learning goal is that students must learn the relationship between actions and events (Neumann, Parry, and Becher, 2002).

Since emotion motivates actions and through empathy one can learn about another’s motivation, business students should learn how to link emotional cues of themselves and others to obtain desirable outcomes. Consistent with the grading practices of business programs, albeit potentially ambiguous practices, grades and a student’s grade point average (GPA) reflect their performance relative to the stated and unstated goals of their programs. Indeed, recruiters view a student’s GPA as one indicator of a student’s work-

related abilities (Roth and Bobko, 2000). For these reasons business students will serve as a proxy for working professionals to explore the proposition that there is a negative association between alexithymia and learning.

## 4.2 Subjects

The subjects of this research are undergraduate business students at Metropolitan State College of Denver, a large, urban baccalaureate college in the Rocky Mountain region of the United States. Using an institutionally-approved research protocol for a larger research project, students were recruited from two sources: (1) a third-year statistic courses that is a requirement for all business majors; and, (2) upper-division information systems courses.

## 4.3 Measures

*Demographics.* One portion of the survey collected demographic information including, but not limited to, GPA, age, and sex. Nine categories comprised the GPA scale that ranged, in increments of 0.25, from first class of 2.0 to the upper class of 4.00. The sample consists of students in five majors: accounting ( $n = 35$ ), computer information systems ( $n = 42$ ), finance ( $n = 15$ ), management ( $n = 35$ ), and marketing ( $n = 22$ ). Of the total responses ( $n = 149$ ), 40.9% were females ( $n = 61$ ) and 59.1% were males ( $n = 88$ ). The mean age was 28.9 ( $SD = 9.4$ ).

*Alexithymia.* The Toronto Alexithymia Scale (TAS-20) is a three-factor instrument for measuring the alexithymia construct (Parker, Taylor, and Bagby, 2003). The three factors are difficulty identifying feelings, difficulty describing feelings, and externally oriented thinking. Responses are on a five-point Likert response scale ranging from (1) strongly disagree to (5) strongly agree. While some research has shown that TAS-20 scores are associated with age, gender, and education, Parker et al. (2003) suggest that the correlations, while significant, are very small. National and ethnic cultures may also influence alexithymia scores (Le, Berenbaum, and Raghavan, 2002). Cronbach's alpha has been reported to be 0.80 (Parker et al., 2003). This study's Cronbach's alpha is 0.74.

The TAS-20 allows alexithymia to be assessed as both a dimensional and a categorical construct (Taylor and Bagby; 2000). As a dimensional construct, the total score ranges from 20 to 100. As a categorical measure, Parker et al. (2003) classify alexithymia into three clinical levels: non-alexithymic ( $TAS-20 \leq 51$ ), moderate alexithymic ( $TAS-20 > 51$  and  $< 61$ ), and high alexithymic ( $TAS-20 \geq 61$ ).

## 4.4 Results

The mean TAS-20 score was 44.3 ( $SD = 12.6$ ). There was no significant difference between the female and male continuous scores ( $p = 0.051$ ). Using the clinical cutpoints to examine the prevalence of alexithymia, 73.2% of the sample were non-alexithymic; 15.4% were moderately alexithymic, and 11.4% were highly alexithymic. Put another way, 26.8% of the sample were either moderately or highly alexithymic. The research proposition was supported by a significant Pearson correlation of -0.193 ( $p=0.009$ , 1-tailed).

## 5 OBSERVATIONS, FUTURE DIRECTIONS, AND CONCLUSIONS

The exploratory findings suggest that alexithymia does inhibit some aspects of learning as indicated by GPA. Although the magnitude of the correlation coefficient indicates that alexithymia explains only a small amount variance in academic performance, its significance suggests future research in corporate settings may be worthwhile.

The most significant aspect of this research is that slightly more than one-fourth of the business students in this sample were alexithymic. When these students graduate they are recruited into organizations but, since alexithymia is neither a mental disorder nor a learning disability, it is unlikely that alexithymics would be screened out of selection or promotion processes. Further, the widespread organizational emphasis on explicit knowledge (Mingers, 2001) may be the outcome of alexithymic executives creating cultures that inhibit the expression of emotion (Kets de Vries, 1999).

This research is limited by the sample characteristics and size. Further research needs to be done to determine prevalence and distribution of alexithymia within organizations. This future research will examine alexithymia by both function and level to determine if of selection and promotion processes influence the distribution of alexithymia within an actual organization. Given the interpersonal behaviors associated with alexithymia, the cost to any organization could be significant in addition to the inhibition of organizational learning processes.

### REFERENCES:

- Antonacopoulou, E., and Gabriel, Y. (2001). “Emotion, learning and organizational change,” *Journal of organizational change*, 14(5), 435-451.
- Bar-On, R. and J. Parker, Eds. (2000). *The handbook of emotional intelligence*, Jossey-Bass, San Francisco, CA.
- Bermond, B., Vorst, H., and Moormann, P. (2006). “Cognitive neuropsychology of alexithymia: implications for personality typology,” *Cognitive neuropsychiatry*, 11(3), 332-360.
- Blanchard, E., Arena, J., and Pallmeyer, T. (1981). “Psychometric properties of a scale to measure alexithymia,” *Psychotherapy and psychosomatics*, 35(1), 64-71.
- Bauermann, T., Parker, J. and Taylor, G.(2002). “Alexithymia and sleep disorder symptoms,” *Sleep*, 25, Suppl. 1, A389.
- Damasio, A. (1994). *Descartes’ error*, Quill, New York, NY.
- de Vignemont, F. and Singer, T. (2006). “The empathetic brain: how, when and why?” *Trends in cognitive sciences*, 10(10), 435-441.
- Domagalski, T. (1999). “Emotion in organizations: main currents,” *Human relations*, 52(6), 833-852.
- George, J. M. (2000). “Emotions and leadership: the role of emotional intelligence,” *Human relations*, 53(8), 1027-1055.
- Goleman, D. (1995). *Emotional intelligence*, Bantam, New York, NY.
- Kerr, S., Johnson, V., Gans, S., and Krumrine, J. (2004). “Predicting adjustment during transition to college: alexithymia, perceived stress, and psychological symptoms,” *Journal of college student development*, 45(6), 593-611.
- Kets de Vries, M. (1999). “Organizational sleepwalkers: emotional distress at midlife,” *Human relations*, 52(11), 1377-1401.



- Krystal, H. (1988). *Integration and self-healing*, Lawrence Erlbaum, Hillsdale, NJ.
- Lane, R., Sechrest, L., Riedel, R., Shapiro, D., and Kaszniak A. (2000). “Pervasive emotion recognition deficit common to alexithymia and the repressive coping style,” *Psychosomatic medicine*, 62, 492-501.
- Le, H-N., Berenbaum, H., and Raghavan, C. (2002). “Culture and alexithymia: mean levels, correlates, and the role of parental socialization,” *Emotion*, 2(4), 341-360.
- Lumley, M. (2004). “Alexithymia, emotional disclosure, and health: a program of research,” *Journal of personality*, 72(6), 1271-1300.
- Mingers, J. (2001). “Embodying information systems: the contribution of phenomenology,” *Information and organization*, 11, 103-128.
- Neumann, R., Parry, S., and Becher, T. (2002). “Teaching and learning in their disciplinary contexts: a conceptual analysis,” *Studies in higher education*, 27(4), 405-417.
- Nonaka, I. and Takeuchi, H. (1995). *The knowledge-creating company*, Oxford University Press, New York, NY.
- Nonaka, I., and Konno, N. (1998). “The concept of ‘ba’: building a foundation for knowledge creation,” *California management review*, 40(3), 40-54.
- Nonaka, I., Toyama, R., and Konno, N. (2000). “SECI, ba, and leadership: a unified model of knowledge creation,” *Long range planning*, 33, 5-34.
- Oatley, K. (2004). *Emotions: a brief history*, Blackwell Publishing, Malden, MA.
- Parker, J., Austin, E., Hogan, M., Wood L., and Bond, B. (2005). “Alexithymia and academic success: examining the transition from high school to university,” *Personality and individual differences*, 38, 1257-1267.
- Parker, J., Taylor, G., and Bagby, R. (2003). “The 20-item Toronto alexithymia scale III: reliability and validity in a community population,” *Journal of psychosomatic research*, 55, 269-275.
- Patterson, G. (1999). “The learning university,” *The learning organization*, 6(1), 9-17.
- Reis, H., Collins, W., and Berscheid, E. (2000). “The Relationship Context of Human Behavior and Development,” *Psychological bulletin*, 126(6), 844-872.
- Roth, P., and Bobko, P. (2000). “College grade point average as a personnel selection device: ethnic group differences and potential adverse impact,” *Journal of applied psychology*, 85(3), 399-406.
- Sifneos, P. (1972). *Short-term psychotherapy and emotional crisis*, Harvard University Press, Cambridge, MA.
- Smart, J., Feldman, K., and Ethington, C. (2000). *Academic disciplines: Holland’s theory and the study of college students and faculty*, Vanderbilt University Press, Nashville, TN.
- Spitzer, C., Siebel-Jürges, U., Barnow, S., Grabe, H., and Freyberger, H. (2005). “Alexithymia and interpersonal problems,” *Psychotherapy and Psychosomatics*, 74, 240-246.
- Taylor, G. (1987). “Alexithymia: History and validation of the concept,” *Transcultural psychiatric research review*, 24, 85-95.
- Taylor, G. and R. Bagby (2000). “An overview of the alexithymia construct,” in Bar-On, R. and Parker, J., Eds. *The handbook of emotional intelligence*, 40-67.
- Vanhuele, S., Desmet, M., Meganck, R., and Bogaerts, S. (2007). “Alexithymia and interpersonal problems,” *Journal of clinical psychology*, 63(1), 109-117.
- von Krogh (1998). “Care in knowledge creation,” *California management review*, 40(3), 122-153.
- Wastell, C. and Taylor, A. (2002). “Alexithymic mentalising: theory of mind and social adaptation,” *Social behavior and personality*, 30(2), 141-148.