We analyzed undergraduates’ (N = 232) day-to-day lying behavior in order to explore the frequency of occurrence, kinds of lying behavior, and gender differences, and to analyze the relationship between lying behaviors and individual undergraduates’ psychological characteristics. We developed a questionnaire and analyzed the results using descriptive statistics, t tests, and Pearson product-moment correlation analysis. Results showed that the undergraduates’ day-to-day behavior could be divided into the following 5 types of lying: excuse, absenteeism, cheating, negative, and spending. More than 80% of the undergraduates said they had told a lie in a day-to-day situation within the 1-year period covered in this study. There was no significant gender difference in any aspect of the undergraduates’ day-to-day lying behavior, although there was a significant correlation between day-to-day lying behavior and negative psychological characteristics.

Keywords: lying behavior, psychological characteristics, cheating, undergraduate students, scale development.

People commonly tell lies in day-to-day living situations for a number of different reasons, for example, to present a better image of themselves to others, to make a divergent view less apparent, or to reduce conflict (Mazar, Amir, & Ariely, 2008). At present, most knowledge about telling lies comes from Western research samples (Fu, Lee, Cameron, & Xu, 2001).
There have been measurement problems in previous lying behavior studies. For example, Gervais, Tremblay, Desmarais-Gervais, and Vitaro (2000) asked parents and teachers to rate teenagers’ lying behavior using only a single question that did not involve either identification of the nature of the lie or the social scenario in which the lie was told. Engels, Finkenauer, and van Kooten (2006) compiled a 12-item scale to measure to whom teenagers lie and reported that teenagers lie not only to their parents, but also to their peers, teachers, and even their employers. Because making up stories and exaggerated boasting are difficult to measure accurately, and because parents are unable to present a complete picture of teenagers’ lying behavior (Mazar et al., 2008), to conduct the analyses in the current study we compiled a day-to-day lying behavior measuring tool that was rated by the students themselves.

Gender differences in lying behavior have aroused the interest of many researchers (Engels et al., 2006). Although this aspect of lying behavior has been explored, researchers have been unable to reach a consensus as to which gender is at the greatest risk for lying behavior (Jensen, Arnett, Feldman, & Cauffman, 2004; Keltikangas-Järvinen & Lindeman, 1997). Thus, in our study, we further analyzed the influence of gender on lying behavior.

In the course of interpersonal interactions, lying behavior can be related to an individual’s psychological characteristics. For example, telling a lie may be a demonstration of the person’s unhappiness, lack of intimacy, inability to get along with others, or a way of avoiding face-to-face communication and interaction (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). In previous studies, significant correlations have been found among the telling of lies to parents and low self-esteem, severe depression, stress, and loneliness (Engels et al., 2006), but few researchers have analyzed the scope of undergraduates’ day-to-day lying behavior and the relationships among that behavior, personality, and emotional adaptation (Engels et al., 2006; Jensen et al., 2004). Thus, we also analyzed the correlation between lying behavior and the respondents’ psychological characteristics—specifically, self-esteem and personality. In summary, we focused on the concept of undergraduates’ day-to-day lying behavior as well as the various types of lying behavior, with a view to establishing whether or not there were gender differences among the undergraduates in regard to lying behavior, and analyzing the relationship between day-to-day lying behavior and the individual psychological characteristics of the undergraduates.

**Literature Review**

**Lying Behavior**

As far as the implications of a *lie* are concerned, DePaulo et al. (1996) found that the content of lying behavior can fall into five categories: cognition, achievement, action/plan/whereabouts, explanation, and fact/property. They also
found that lying behavior is a day-to-day fact of life, undergraduates lied twice a day on average, and 38% of them lied to those with whom they interacted. Further, DePaulo et al. found that liars do not regret their lies. If given a second chance, 70% of liars will lie again. Jensen et al. (2004) found that most senior high school students had told a lie to their parents to do with their friends, parties, and dates, claiming that they had the right to make a decision and to lie for their own reasons. The reasons that young people lie to their parents can be divided into six types: friends, money, parties, alcohol/medicine, dates, and sexual behavior. In a more concrete sense, the day-to-day lie more often concerns issues such as cognition, preference, views, general achievement and failure (e.g., passing an examination or putting on weight), regular behavior, plans, and whereabouts. Therefore, the day-to-day lie can be related to either good or bad behavior. People can lie to make others feel better about themselves, or to protect them from a hurtful truth, but lying can also cause discomfort for the lying victim (DePaulo, Ansfield, Kirkendol, & Boden, 2004).

In summary, excuse lying means that an individual wants to achieve something and makes excuses in order to do so; an absenteeism lie is used to cover an absence; a cheating lie means that an individual conveys a false and deceiving message to others; a negative lie is meant to cover up the individual’s true inner thoughts through subterfuge; and a spending lie refers to covering up the real purpose of money usage.

Gender Differences

Research results vary with regard to whether or not there are gender differences in lying behavior. In some studies, the results have shown that boys were more tolerant than were girls regarding lying behavior and that they more often told lies to their parents than did girls (Jensen et al., 2004; Keltikangas-Järvinen & Lindeman, 1997). Other researchers have found that men were more inclined to lie about money and alcohol/medicine than were women (Dreber & Johannesson, 2008; Ellingsen, Johannesson, Lilja, & Zetterqvist, 2009; Erat & Gneezy, 2011; Friesen & Gangadharan, 2012; Jensen et al., 2004; Pruckner & Sausgruber, 2013; Ross & Robertson, 2000). Further, others (Belot & Schröder, 2013; Cadsby, Song, & Tapon, 2010; Childs, 2012; Gylfason, Arnardottir, & Kristinsson, 2013) have found no difference in lying by gender.

DePaulo, Epstein, and Wyer (1993) observed that when women interact with others, lie telling is generally aimed at fostering intimacy and is considered by the women to be supportive. DePaulo et al. (1996) did not find any gender difference in the frequency of telling lies, but found that there was a gender difference in terms of the nature of telling a lie. Young women seem to lie to make allowance for others more than do men, because telling the truth is not more important for young women than are others’ feelings; however, young men are inclined to tell
lies for their own benefit. In sum, the relationship between gender differences and lying behavior is still unclear and, thus, was further investigated in this study.

**Psychological Characteristics**

Social psychologists have emphasized the relevance of psychological characteristics and the importance of the scenario in lying behaviors (Rosenbaum, Billinger, & Stieglitz, 2014). Significant correlations have been reported among extraversion, neuroticism, and lying behavior (Conrads, Irlenbusch, Rilke, & Walkowitz, 2013; Jensen et al., 2004). Kashy and DePaulo (1996) found that a liar is more likely than is a person who tells the truth to be a socially adroit Machiavellian. Lying behavior can be considered as a kind of transgression. Therefore, previous researchers found that the psychological characteristics of liars were similar to those of people who engaged in cheating behaviors and betrayal of friends’ secrets (Cauffman, Feldman, Jensen, & Arnett, 2000; Feldman, Cauffman, Jensen, & Arnett, 2000; Jensen, Arnett, Feldman, & Cauffman, 2002).

Teenagers with low self-esteem and who are melancholic may try to make themselves look better via a lie (Kashy & DePaulo, 1996). In an empirical study of teenagers and lying to parents, Engels et al. (2006) showed that, compared with their peers, teenagers who told lies frequently had lower self-esteem, suffered from melancholy, and had high stress levels; further, teenage girls who told lies more often than the norm were lonelier than were girls who told fewer lies. Thus, we proposed the following hypothesis:

**Hypothesis 1:** In a group of undergraduate students, lie telling on a day-to-day basis will be positively associated with a greater number of negative psychological characteristics.

**Method**

**Participants**

Respondents were undergraduate students at one college and one university in northern Taiwan. We informed the students that they could stop participating at any time and that anonymity was assured. For the pretest, we used purposive sampling of 220 students at the university and college. From the pretest questionnaires we distributed, after rejecting forms with incomplete answers, 212 valid ones remained, which were submitted by 93 men (43.9%) and 119 women (56.1%).

The respondents in the main study were a convenience sample from the same college and university attended by the students in the pretest. There were 232 valid questionnaire forms. The age of the students ranged from 18 to 22 years, which met the requirement that undergraduates be the research targets in this study.
Measures

To develop the Undergraduate Day-to-Day Lying Behavior Scale, we invited 81 freshmen at the college to answer an open-ended question “To whom have you told a lie in the past year?” These undergraduates were invited to make three or more concrete answers, not subject to lying targets. We compiled the questions in the scale for pretesting on the basis of these answers. Finally, 23 questions were developed for a pretest. Respondents chose from five options that were rated on a 5-point scale: no occurrence = 0, once = 1, twice = 2, three times = 3, four or more times = 4. We measured lying behavior within the year prior to the date when the undergraduates were responding to the items in the scale. A higher total score on the scale meant that the day-to-day lying behavior occurred more often within that year.

The validity of the scale items was assessed by factor analysis and correlation analysis, with an eigenvalue over 1, and a scarp test as the factor selection criteria. The axis was rotated orthogonally by varimax rotation. Items with a factor loading below .4 and with double loadings were removed. The result of the Kaiser–Meyer–Olkin measure of sampling adequacy was .77 and of Bartlett’s test of sphericity was $\chi^2 (153) = 1,396.14, p < .001$. The following five factors were established: excuse lie (four items; e.g., “In order to spend a night out with my favorite person, I will tell my parents that I am doing something else”), which explained 25.94% of the variance; absenteeism lie (four items; e.g., “When I want to skip work, I will tell my family that I do not have to go to work today”), which explained 10.64% of the variance; cheating lie (four items; e.g., “I will boast of my own achievement to others”), which explained 7.82% of the variance; negative lie (three items; e.g., “When I do not want to go out with my friends, I tell them that I am busy or have a date”), which explained 7.54% of the variance; and spending lie (three items; e.g., “I tell my parents that I spend my money on food but, in fact, I spend it on entertainment”), which explained 7.01% of the variance. These 18 items explained 58.93% of the variance. The internal consistency Cronbach’s $\alpha$ coefficients of the subscales of the Undergraduate Day-to-Day Lying Behavior Scale were, respectively, .71, .66, .69, .72, and .71, and that for the full scale was .83. Thus, the reliability and validity of the scale were acceptable.

The respondents also completed Rosenberg’s (1965) Self-Esteem Scale. There are 10 items in the scale, of which five are positive and five negative. A 5-point Likert measuring scale is used (1 = complete disagreement to 5 = complete agreement). The internal consistency reliability of the scale was .89.

The respondents also completed Lais’ Personality Inventory, which is composed of 150 items assessing personality characteristics in 15 subscales. The test–retest reliability ranged from .71 to .93, and the reliability of the subscales ranged from .62 to .81 (Lai & Lai, 2003). In our study, we used five subscales (social
Table 1. Zero-Order Correlations Among, and Averages and Standard Deviations of, Undergraduates’ Day-to-Day Lying Behaviors and Individual Psychological Characteristics

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Note. (N = 232). SD = standard deviation. *p < .05, **p < .01, ***p < .001. S = self-esteem, SE = social extraversion, IF = feeling of inferiority, N = nervousness, A = anxiety, MC = melancholy. EL = excuse lie, AL = absenteeism lie, CL = cheating lie, NL = negative lie, SL = spending lie.
extraversion, feeling of inferiority, nervousness, anxiety, and melancholy). Each subscale contains 10 items, so there were 50 items over the five subscales we used in our study. In terms of response options, a “yes” response scores 2 points, “?” (indicating no opinion) scores 1 point, and “no” scores 0. The internal consistency reliability coefficients of the subscales were, respectively, .85, .83, .87, .89, and .87.

Results

Frequency of Undergraduate Day-to-Day Lying Behavior

Among the undergraduate participants, 192 (82.76%) indicated that they had told a lie within the past year, with the daily frequency being 0.824. When the undergraduates’ lying behavior was analyzed by factors, the average frequencies with which participants told each type of lie was, respectively, negative lie (1.36), excuse lie (0.84), spending lie (0.76), absenteeism lie (0.68), and cheating lie (0.60).

Differences in Undergraduates’ Day-to-Day Lying Behavior According to Gender

The results revealed no significant gender difference in scores on either the subscales or the total scale for the undergraduates’ lying behaviors.

Correlation Analysis

The correlations among the subscales of the Undergraduate Day-to-Day Lying Behavior Scale and participants’ psychological characteristics are shown in Table 1.

Discussion

The important initial exploration in this study of the concept of undergraduate day-to-day lying behavior and the types of that behavior will enhance understanding of the correlations among gender, psychological characteristics, and undergraduates’ day-to-day lying behavior. To begin with, we developed the Undergraduate Day-to-Day Lying Behavior Scale in order to explain the nature of undergraduates’ day-to-day lying. Our findings showed that the day-to-day lying behavior analyzed in this study was related to the personality of the liar, in accordance with the view presented by DePaulo et al. (1996) that the content of 80% or more lies is related to the psychological characteristics of the liar. We found that 80% or more of undergraduates had told a negative lie at least once in their daily lives within the past year in order to reject an invitation from others, because they were unwilling to do something, because they had something they wanted to finish, or because they were hiding an inner desire. This lying behavior
may also be a social skill that allows the person to avoid conflict while interacting with others (DePaulo & Jordan, 1982; Nyberg, 1993). If others discover that the person is telling a lie, this can cause tension within the interpersonal relationship, which can, in turn, create further interpersonal adaptation problems (Lippard, 1988; Metts, 1989).

In comparison with the findings presented by DePaulo et al. (1996) that undergraduates tell a lie twice a day, in this study the frequency with which the undergraduates in Taiwan told a lie was not so high, which may be explained by differences between Eastern and Western cultural values; namely, that students in Taiwan may put more emphasis on group demands and goals than on personal demands and goal satisfaction, and give more consideration to relationships with others and satisfying group demand than do students in Western countries (Triandis, McCusker, & Hui, 1990). We also found that the undergraduates in our study told a negative lie more often than a positive lie, which may reflect a poor quality of peer relationships among undergraduates; negative lies are told to hide a person’s true feelings, perhaps showing a lack of strong peer interaction among students.

We did not find any significant difference according to gender in any of the types of undergraduates’ day-to-day lying behavior. This result matches that reported by DePaulo et al. (1996). It may be that, compared to young men, young women need, and can acquire, more intimacy, greater disclosure, more emotional support, and are friendlier and tell more lies, but still consider the feelings of others and interpersonal demands. In a relative sense, our results in terms of a lack of gender difference differ from those in studies on tolerance of lying behavior, telling a lie to parents (Jensen et al., 2004; Keltikangas-Järvinen & Lindeman, 1997), and lying about issues such as money and using alcohol/medicine (Jensen et al., 2004).

There was a significant correlation found between undergraduates’ day-to-day lying behavior and negative psychological characteristics. These results not only support our hypothesis that undergraduates who lie more frequently than their peers have low self-esteem, high anxiety, and impaired psychological health (e.g., nervousness and melancholy), but also accord with the findings in previous studies on lying to parents (Engels et al., 2006; Gervais et al., 2000). Our results also showed that high levels of nervousness, anxiety, and melancholy are often related to cheating and telling negative lies, which may indicate that people who tell a cheating/negative lie generally want to make themselves look better in the eyes of others, and want to prevent others from feeling rejected and/or worrying, which may be related to the efforts made by the undergraduates to achieve improved self-esteem and better interpersonal relationships.

Some limitations may have influenced the research results. First, the sample was drawn from among the undergraduates of one college and one university;
thus, caution should be exercised regarding generalizing the results to other samples. The scope and number of people in the sample could be expanded in order to verify the results in future research. Second, the lying content focus in this study was only on undergraduates’ day-to-day activities. For teenagers, lying behavior is a potential indicator for clinical diagnosis with a conduct disorder. However, the lying behavior measures in this study could not be used to detect whether or not the undergraduates could be clinically diagnosed as having a conduct disorder. A higher score on the Undergraduate Day-to-Day Lying Behavior Scale only indicates a greater possibility of developing lying tendencies. Third, the day-to-day lying targets explored in this study comprised parents and families, teachers, friends and peers, and employers; lies told in intimate relationships were not examined. Exploring lies told by undergraduates to their romantic partner is recommended in future research.

References


