

USING SMALL GROUP LEARNING STRATEGIES WITH ADULT RE-ENTRY STUDENTS

SUSAN A. BREWER

University of Phoenix

JAMES D. KLEIN

Arizona State University

KENNETH E. MANN

University of Phoenix

The purpose of this study was to investigate the effect of small group learning and the affiliation motive on achievement, attitude, and interactions of adult re-entry students. College re-entry students identified as high or low need for affiliation worked either individually or in small groups to practice material taught during a class lecture. While achievement was not influenced, results indicated that students who worked in small groups expressed more confidence and continuing motivation than those who worked individually. There was an interaction between practice condition and affiliation motive on attitude items regarding enjoyment, belief about ability to learn, and in-class and homework activities. Results also revealed that high affiliation groups exhibited significantly more on-task behaviors than low affiliation groups. Implications for using small group strategies with adult re-entry students are discussed.

The success of small group learning has been well documented in studies with school children and to a lesser extent with college students. According to Johnson and Johnson (1996), cooperative learning has a positive influence on student achievement, attitude, and perception of social support and self esteem. A meta-analysis of 39 studies in undergraduate science, math, engineering, and technology settings points to significant positive effects of small group learning on achievement, persistence, and attitude (Springer, Stanne, & Donovan, 1999). Wedman, Hughes, and Robinson (1993) compared systematic cooperative learning to direct instruction with undergraduate education majors and found significant differences in learning outcomes favoring small groups. Additionally, participants rated working with a

group as more beneficial to their learning than listening in class. Furthermore, a study of undergraduate psychology students revealed significant differences favoring a small group strategy on measures of initial learning and transfer to a subsequent individual learning situation (McDonald, Larson, Dansereau, & Spurlin, 1985).

A few researchers have investigated adult learners working cooperatively in technical training settings. Cavalier, Klein, and Cavalier (1995) reported higher posttest scores in favor of structured versus unstructured cooperative groups during technical training. In another adult technical training setting, Yadrick, Regian, Connolly-Gomez, and Robertson-Schule (1997) found that collaborative dyads using a structured computer tutorial system per-

formed better on math word problems than individuals using the structured system and dyads using an exploratory system.

On the other hand, some researchers have found achievement differences in favor of working individually. Klein and Schnackenberg (2000) found that undergraduates working alone learned more than those working in cooperative dyads. Klein, Erchul, and Pridemore (1994) investigated informal cooperative learning and type of reward with undergraduate education majors and found that students who worked alone performed better on achievement measures, with significant differences according to type of reward provided.

While studies on using small group strategies have been conducted with college students, there has been very little research on using small groups with adult college re-entry students. In one study, Thompson and Scheckley (1997) investigated preference for classroom teaching methods among nursing students and reported that adults with prior nursing education rated cooperative learning significantly higher than either traditional age students or adults with no prior nursing education. In another study, Cole and Smith (1993) found that adult students in business English classes who participated in small groups exhibited increased positive interactions compared to adult students who participated in an interactive classroom where the teacher called on students at random.

Researchers suggest that the motivational characteristics adult college re-entry students bring to an instructional setting differ from those of traditional, 18-22 year old students (Klein, 1990). Adult students are motivated to learn in situations in which

they can relate new information to life experiences and use new information in real-life situations (Brookfield, 1986; Cross, 1981; Knowles, 1980, 1984). Re-entry students often lack confidence in their ability to succeed and are frequently unsure if their efforts are adequate (Klein, 1990; Steltenpohl & Shipton, 1986). In addition, many adult re-entry students have a low to moderate need for affiliation (Graham, 1988; Klein, 1990; Kuh & Aridaiole, 1979; Steltenpohl & Shipton, 1986; Wolfgang & Dowling, 1981).

The need for affiliation is likely to influence students' preference for small group strategies and how they perform in these settings. The reasonable expectation that high affiliation or high sociability students prefer group work can be substantiated, but the interrelationship of preference for group work, motivation, and achievement during cooperative learning is documented with mixed results. Sutter and Reid (1969) reported that college students with high levels of sociability performed better using cooperative learning with computer assisted instruction, while Chan (1980-1981) found no differences in achievement between high and low affiliation high school students using either a cooperative or individual learning method. Klein and Pridemore (1992) found that high affiliation college students working alone scored significantly lower on application items compared to high affiliation students working individually and low affiliation students in both group and individual conditions.

The opportunity to work in small informal groups provides an avenue to interact with peers, fulfilling the needs of some adult learners with a high affiliation motive.

Observing for interaction behaviors within a small group treatment, Klein and Schnackenberg (2000) found that high affiliation dyads exhibited significantly more on-task behaviors, but also exhibited significantly more off-task behaviors compared to low affiliation dyads. Klein and Pridemore (1992) found that undergraduates working cooperatively spent more time on task than did those who worked individually, without regard to high or low need for affiliation. Cavalier et al. (1995) found significant differences in social and cognitive behaviors, with increased activity among structured cooperative groups compared to unstructured groups. Cole and Smith (1993) observed increased camaraderie among students working in informal cooperative groups, noted in terms of willingness to help group members, expressing excitement over improvement in one another's test scores, and willingness to express that one did not understand a part of the content.

The purpose of the current study was to investigate the effect of small group learning and the affiliation motive on achievement, attitude, and the interactions of adult re-entry students. The study attempts to extend previous research (Klein & Schnackenberg, 2000; Klein & Pridemore, 1992) by examining the relationship between affiliation motive and interactions during small group learning for the specific target audience of adult re-entry students.

Method

Participants

Participants were 109 undergraduate business majors (58 males and 51 females)

enrolled at a private, degree completion university for adult learners. University admission standards indicate that these students are a minimum age of 23, have been employed for two years, and have earned 30 college credit hours upon admission. Participants were drawn from seven sections of a required course in management. One instructor taught two of the sections while five other instructors taught the remaining sections.

Materials

Materials used in this study were a need for affiliation scale, student workbooks, an instructor guide, an observation checklist for recording group interaction behaviors, a measure of student attitude, and a posttest.

The instructional materials used in this study, namely the student workbooks, instructor guide, and posttest, were derived from the required text for the class, *Management: Leading people and organizations in the 21st century* (Dessler, 1998). Two lessons, one on organizational structure and one on employee motivation, were developed for the study. Each lesson included learning objectives, a timed presentation sequence for the instructor's lecture, and a set of overhead transparencies to display six types of organizational charts and content points related to the theoretical foundations of employee motivation, such as Maslow's Hierarchy of Needs, behavior modification, and management systems of empowerment.

Workbooks for small groups and individuals were identical and provided two sections of practice items. The first section covered the topic of organizational structure and contained 12 selected

response items and four constructed response items pertaining to a case study and related organizational chart. The second section covered the topic of employee motivation and contained 12 selected response items and four constructed response items pertaining to a case study. The selected response items provided a question and offered five answer options. The constructed response items followed a text passage of approximately 150 words in which a business case study was presented. For the topic of organizational structure, a fictitious company was described, accompanied by its mock organizational chart. For the topic of employee motivation, an actual company and its innovative management practices were described. The constructed response items asked for identification, analysis, and synthesis with questions such as, "What are the weaknesses you see in this organization chart?" and "In terms of empowerment, what are the advantages to the employer in this scenario?"

The affiliation scale of the Personality Research Form-E (Jackson, 1974) consisted of 16 items that measure the degree to which an individual is motivated to affiliate with others. A true / false format is used to indicate whether or not a person agrees with statements such as "Often I would rather be alone than with a group of friends" and "I go out of my way to meet people." According to Jackson (1974), a high score on this scale suggests that the individual enjoys being with other people, readily accepts people, and makes an effort to have friends and maintain associations with others. Norming data indicate that the average score on this scale is 8.6 (SD =

3.35) and that the internal consistency reliability is .86 when used with college students (Jackson, 1974).

An observation checklist was adapted from an instrument used by Klein and Pridemore (1992) to record group interactions during the two practice sessions. The observation protocol directed trained observers to record interaction behaviors in the following categories: 1) on-task group behaviors such as statements intended to accomplish the task, helping another student, sharing materials, taking turns; 2) on-task individual behaviors such as assuming control, taking notes, working alone; and 3) off-task behaviors such as talking about something unrelated to the topic or non-verbal actions such as reading a newspaper.

A 26-item posttest was used to measure achievement on the instructional objectives. A maximum possible score on the posttest was 48 points. It consisted of 12 selected response items for each topic (total of 24 items) and one case study that posed four constructed response questions for each topic. Each case study question had a maximum possible score of 3 points. The test form presented items by response type and subsequently grouped items together by topics in the same order as the instructional sequence. The posttest items were identical or parallel to those used in the workbook. A related answer key and scoring rubric for the open-ended items were also developed. The answers to constructed response items were scored blind by one person using a rubric that yielded 0 to 3 points possible for each item. The Cronbach alpha internal consistency reliability of the posttest was .71.

An eight-item attitude survey (see Table 1) was developed by the authors to measure student confidence, continuing motivation, and enjoyment for the practice method they experienced. A five-point Likert scale was used to respond to each attitude item (1 = not true, 5 = very true). The Cronbach alpha internal consistency reliability of the attitude survey was .72.

Procedures

Instructor participation was solicited several weeks prior to the study. Two weeks before the instructional lesson, participants completed the affiliation scale. A median split was used to assign participants to high and low categories of the need for affiliation. Participants with scores at or above the median ($Md = 11$) were assigned to the high affiliation category ($n = 53$) and those with scores below the median were assigned to the low affiliation category ($n = 56$). The mean score for participants assigned to the high affiliation group was 12.38 ($SD = 1.52$) and the range was 11-16. The mean score for those assigned to the low affiliation group was 7.11 ($SD = 2.07$) and the range was 1-10.

After blocking by need for affiliation, participants were randomly assigned to either the small group or individual treatment group. Group sample sizes ranged from 23 to 32: 24 participants were in the individual learning / low affiliation group, 23 were in the individual learning / high affiliation group, 32 were in the small group / low affiliation group, and 30 were in the small group / high affiliation group. The small variation in group size was due to random assignment of participants to the small group or individual treatments;

the small groups were homogeneously composed of three low or three high affiliation participants.

The experimental period consisted of two 20-minute lectures and two 40-minute practice sessions within the treatment conditions. The first lecture on the topic of organizational structure was conducted for the entire class; participants then moved to their small group or individual treatment conditions for a 40-minute practice session. After a break, all students returned to their regular classroom setting to receive a 20-minute lecture on the topic of employee motivation; participants then moved to their same treatment conditions for a 40-minute practice session on this second topic. The instructors used a standard set of overhead transparencies and a timed instructional sequence to present the content during each 20-minute lecture.

Participants in both treatment conditions participated jointly in the classroom lecture sessions and were informed that they would be using workbooks to practice the content of each lesson. They were told that the score they earned during the posttest for these units could be used, at each person's discretion, to substitute for an individual assignment required for the course. Participants were given further direction to stay in the room and continue reviewing the materials until the end of the timed practice session. In both the small group and individual treatments, observations of study behavior were conducted.

Participants in small groups were given directions both orally and in written form on page one of the workbook to assign the roles of facilitator, recorder, and verifier to each member of the group and to use

these roles to complete the practice items. Each group of three participants shared materials by using a single workbook, a single textbook for reference, and a single organizational chart associated with the case study. The small groups were observed for three-minute intervals throughout each 40-minute practice session. On-task and off-task group behaviors were recorded.

After each lecture, participants who had been randomly assigned to work individually moved to another room. They were given directions both orally and in written form on page one of the workbook to identify a personal strategy for completing the practice items. Each participant used his or her own workbook, textbook, and organizational chart associated with the case study. Ad hoc groups of three participants, working individually but seated in the same vicinity, were observed for three-minute intervals throughout each 40-minute practice session. On-task individual behaviors such as reading, taking notes, and working alone were recorded. Each occurrence of an off-task behavior was also noted, as well as one-minute status marks to indicate a continuing on-task behavior. On- and off-task behaviors were reported as frequencies per treatment group per practice session.

Upon completion of the second practice session, all students returned to their regular classroom setting and were given a posttest and attitude survey. Participants in both groups were tested together in the same room and performed individually on the posttest, without the use of the workbooks, notes, or textbook reference.

During the week following the experimental period, answers to selected response items were checked against a scoring key

and were scored as either right or wrong. The answers to constructed response items were scored blind by one person using a rubric that yielded 0 to 3 points possible for each item. At the next regularly scheduled class meeting, participants confidentially received photocopies of their scored tests, results of their need for affiliation scale, and information on the purpose of the study and interpretation of scores. All questions from the instructor and student participants were answered publicly.

Design and Data Analysis

A 2 x 2 factorial design was used with practice condition (small group or individual) and need for affiliation (high or low) as the independent variables. The dependent variables were achievement and student attitudes. In addition, the interaction behaviors of a sample of small groups were observed and analyzed.

Analysis of variance was used to test for an overall difference between treatment groups on the posttest and on the eight attitude items. A Tukey test was used to follow up on significant interaction effects. Chi-square analyses were used to test for an overall difference in the frequency of interaction behaviors between a sample of 10 low affiliation and 10 high affiliation triads working in small groups. Alpha was set at .05 for all statistical tests.

Results

Achievement

Achievement data show that the mean for participants who worked in small groups was 34.52 (SD = 5.82) and was 34.81 (SD = 6.41) for participants who

worked alone. The mean for participants with high affiliation was 34.53 ($SD = 6.46$) and was 34.75 ($SD = 5.70$) for participants with low affiliation. ANOVA did not show a significant main effect for practice condition, affiliation motive, or a significant interaction effect.

Attitude

Table 1 shows the means and standard deviations for responses to the eight attitude items: ANOVA indicated a significant main effect for practice condition on attitude items #2 and #4. Participants in the small group condition reported greater confidence ($M = 3.68$) than those in the individual condition ($M = 3.30$), $F(1,108) = 4.74$, $p < .05$. In addition, participants who worked in a small group reported greater continuing motivation ($M = 3.68$) than those who worked by themselves ($M = 2.91$), $F(1,108) = 9.43$, $p < .01$.

Results also revealed a significant interaction between practice condition and affiliation motive on four of the eight attitude items. A significant interaction was found for item #5, which referred to enjoying the practice activity, $F(1,105) = 6.010$, $p < .05$. Follow-up tests showed that high affiliation students who worked in small groups ($M = 4.30$) enjoyed the practice activity significantly more than high affiliation students who worked individually ($M = 2.30$) and low affiliation students who worked individually ($M = 2.87$), $F(1,105) = 10.36$, $p < .01$.

A significant interaction was found for item #6, which referred to belief about one's own ability to learn within the practice condition, $F(1,105) = 4.483$, $p < .05$. Follow-up tests indicated that students with

high need for affiliation who worked in small groups ($M = 4.33$) had a significantly stronger belief that they learned well in their practice condition compared to students with high need for affiliation who worked individually ($M = 2.65$) and compared to those with low need for affiliation who worked individually ($M = 3.00$), $F(1,105) = 7.74$, $p < .01$.

A significant interaction was also found for item #7, which referred to preference for doing homework assignments between classes. Among participants who worked in a small groups, those with high affiliation motive ($M = 3.37$) preferred to do homework with others more than those with low affiliation motive ($M = 2.84$), $F(1,105) = 4.92$, $p < .05$. In contrast, among participants who worked individually, those with low affiliation motive ($M = 3.17$) preferred to do homework by themselves more than those with high affiliation motive ($M = 2.57$), $F(1,105) = 4.92$, $p < .05$.

Finally, a significant interaction was found for item #8, which referred to preference for doing classroom activities. Follow-up tests indicated that participants with high need for affiliation who worked in small groups ($M = 3.90$) liked using their practice condition for classroom activities significantly more than participants with high need for affiliation who worked individually ($M = 1.83$) and those with low need for affiliation who worked individually ($M = 2.62$), $F(1,105) = 16.13$, $p < .01$.

Cooperative Interaction Behaviors

The number of student interactions exhibited by participants in 10 low affiliation groups and 10 high affiliation groups were observed and recorded. Table 2 shows

the number of interaction behaviors exhibited by participants during their practice sessions. Chi-square tests conducted on these data revealed that high affiliation groups exhibited significantly more on-task group behaviors (making statements intended to accomplish the task, helping, sharing materials, taking turns) than low affiliation groups ($X^2 = 6.80, p < .01$). Furthermore, high affiliation groups exhibited significantly more on-task individual behaviors (assuming control, taking notes, working alone) than low affiliation groups ($X^2 = 6.17, p < .05$). There were no significant differences between low and high affiliation groups for off-task behaviors.

Qualitative records of interaction behaviors revealed that all participants in the small group treatment condition were physically and verbally active during practice. Trained observers recorded that small group participants "stood up," "moved to the other side of the table," "sat on the table," "held up the organizational chart to demonstrate," "read aloud from the book," and "read back the recorded answer for verification." While participants in the individual practice were directed to work by themselves, they were also observed in some physical and verbal activity during their timed practice. Trained observers recorded that individuals "complained to others about the assignment," "commiserated about the assignment," "left the room and returned with a soda," and "read the newspaper when finished with the workbook."

Discussion

The purpose of this study was to investigate the influence of small group practice

and the affiliation motive on the achievement, attitude, and interaction of adult re-entry students.

In the current study, results for attitude indicated that students preferred small group practice over individual practice. There was a significant main effect indicating preference for small group practice on two attitude items regarding confidence and continuing motivation. For three attitude items regarding enjoyment, belief about ability to learn, and in-class activities, there was an interaction indicating that participants with a high affiliation motive and who worked in small groups favored their experience more than anyone who worked individually. The results of another attitude measure regarding homework assignments revealed an interaction in which high affiliation participants preferred group work and low affiliation participants preferred individual work. These findings are consistent with results of other researchers in undergraduate and adult learning settings (Klein & Schnackenberg, 2000; Thompson & Scheckley, 1997; Klein & Pridemore, 1992; Sutter & Reid, 1969).

Regarding student achievement, no significant differences were found. This may have been due to the instructional materials used by students in both treatment conditions. The lesson was designed following a systematic approach and included objectives, practice materials aligned with the posttest, and a timed instructional sequence for the teachers' lectures. Bossert (1988-89) suggested that researchers comparing individual and cooperative learning do not consistently find differences between these methods when well designed instructional materials are used, and that

many studies showing positive results in favor of small groups have compared carefully designed cooperative materials to poorly designed instructional materials for individuals. Similarly, Cole and Smith (1993) found no significant differences in group vs. individual work.

Turning to cooperative interaction behaviors, high affiliation groups exhibited significantly more on-task group behaviors than low affiliation groups. This finding is consistent with research noting increased positive interaction behaviors during small group learning (Klein & Pridemore, 1992; Cavalier et al., 1995; Cole & Smith, 1993). Additionally, high affiliation groups exhibited significantly more on-task individual behaviors than low affiliation groups. The proliferation of on-task individual behaviors during small group work may be explained by the phenomenon of "three's a crowd." That is, while two students in the group were engaged in dialogue, the third student may have used this opportunity to read individually from the shared materials or write individually on the shared workbook. Regarding off-task behaviors, there was no difference between high and low affiliation groups. This finding differs from the finding by Klein and Schnackenberg (2000) who reported that high affiliation undergraduate pairs were off-task significantly more often than low affiliation pairs. Given the opportunity to participate in small group activities, adult re-entry students may remain focused and stay on-task more than traditional age college students.

Implications of this study point to the advisability of including small group learning activities in higher education for adult re-entry students. While achievement was

not influenced by practice condition, continuing motivation, confidence, enjoyment, and belief about ability to learn were higher for students who used the small group strategy. These attitudinal gains may positively support adult learners throughout the academic and social experience of completing an undergraduate degree. Persistence to complete a course and maintain continuous enrollment is vital to the adult student re-entering college after an absence of a few or several years, and the benefits of small group learning may well have an impact on academic success apart from achievement scores (Horn et al. 1998). When combined with the results of other studies (Klein & Schnackenberg, 2000; Klein & Pridemore, 1992; Sutter & Reid, 1969; Thompson & Scheckley, 1997), the current study also suggests that educators should consider students' needs and motives for working with others before assigning them to an individual or small group learning strategy.

While the findings from the current study do not support the assertion that small group strategies influence achievement, further research should continue to explore the use of small groups in specific populations of adult learners. Research on the use of popular instructional strategies such as small group learning should be conducted with re-entry students to inform educators who work with this population.

Author Note

The authors wish to thank the instructors and their students who participated in this study. In alphabetical order, the instructors were Beverly A. Browning, MPA; Steven Feldman, Ph.D., J.D.; Russell Phalen, Ph.D.; Thomas J. Tyschper, MBA; and Jack G. Wagner, MBA.

References

- Bossert, S. T. (1988-1989). Cooperative activities in the classroom. In E. Z. Rothkopf (Ed.), *Review of research in education* (pp. 225-250). Washington, D. C.: American Educational Research Association.
- Brookfield, S. (1986). *Facilitating adult learning*. San Francisco: Jossey-Bass.
- Cavalier, J. C., Klein, J. D., & Cavalier, F. J. (1995). Effects of cooperative learning on performance, attitude, and group behaviors in a technical team environment. *Educational Technology Research and Development*, 43(3), 61-71.
- Chan, R. M. (1980-1981). The effect of student need for affiliation on performance and satisfaction in group learning. *Interchange*, 11, 39-46.
- Cole, B. C., & Smith, D. L. (1993). Cooperative learning strategies for teaching adult business English. *Journal of Education for Business*, 68(3), 170-73.
- Cross, K. (1981). *Adults as learners*. San Francisco: Jossey-Bass.
- Dessler, G. (1998). *Management: Leading people and organizations in the 21st century*. Upper Saddle River, NJ: Prentice Hall.
- Horn, E. M., Collier, W. G., Oxford, J. A., Bond, C. F. Jr., & Dansereau, D. F. (1998). Individual differences in dyadic cooperative learning. *Journal of Educational Psychology*, 90(1), 153-161.
- Jackson, D. N. (1974). *Personality research form manual*. Goshen, NY: Research Psychologists Press.
- Johnson, D. W., & Johnson, R. T. (1996). Cooperation and the use of technology. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology* (pp. 1017-1044). New York: Simon & Schuster Macmillan.
- Klein, J. D. (1990). An analysis of the motivational characteristics of college reentry students. *College Student Journal*, 24(3), 281-286.
- Klein, J. D., & Pridemore, D.R. (1992). Effects of cooperative learning and need for affiliation on performance, time on task, and satisfaction. *Educational Technology Research and Development*, 40(4), 1042-1629.
- Klein, J. D., Erchul, J. A., & Pridemore, D. R. (1994). Effects of individual versus cooperative learning and type of reward on performance and continuing motivation. *Contemporary Educational Psychology*, 19, 24-32.
- Klein, J. D., & Schnackenberg, H. L. (2000). Effects of informal cooperative learning and the affiliation motive on achievement, attitude, and student interactions. *Contemporary Educational Psychology*, 25, 332-341.
- Knowles, M. (1980). *The modern practice of adult education*. New York: Cambridge.
- Knowles, M. (1984). *Andragogy in action*. San Francisco: Jossey-Bass.
- Kuh, G.D., & Ardaiole, F.P. (1979). Adult learners and traditional age freshmen: Comparing the "new" pool with the "old" pool of students. *Research in Higher Education*, 10, 207-219.
- McDonald, B. A., Larson, C. O., Dansereau, D. F., & Spurlin, J. E. (1985). Cooperative dyads: impact on text learning and transfer. *Contemporary Educational Psychology*, 10, 369-377.
- Springer, L., Stanne, M. E., & Donovan, S. S. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: A meta-analysis. *Review of Educational Research*, 69(1), 21-51.
- Steltenpohl, E., & Shipton, J. (1986). Facilitating a successful transition to college for adults. *Journal of Higher Education*, 57, 637-658.
- Sutter, E. G., & Reid, J. B. (1969). Learner variables and interpersonal conditions in computer-assisted instruction. *Journal of Educational Psychology*, 60, 153-157.
- Thompson, C., & Scheckley, B. G. (1997). Differences in classroom teaching preferences between traditional and adult BSN students. *Journal of Nursing Education*, 36, 163-70.
- Wedman, J. M., Hughes, J. A., & Robinson, R. R. (1993). The effect of using a systematic cooperative learning approach to help preservice teachers learn informal reading inventory procedures. *Innovative Higher Education*, 17(4), 231-241.
- Wolfgang, M.E., & Dowling, W.D. (1981). Differences in motivation of adult and younger undergraduates. *Journal of Higher Education*, 52, 640-648.

Yadrick, R. M., Regian, J. W., Connolly-Gomez, C., & Robertson-Schule, L. (1997). Dyadic vs. individual practice with exploratory and directive mathematics tutors. *Journal of Educational Computing Research*, 17(2), 165-186.

Table 1
Means and standard deviations of attitude item responses within treatment conditions.

	Practice Condition by Need for Affiliation			
	Group + High	Group + Low	Individual + High	Individual + Low
1. At the start of the practice, I felt confident that I knew what I was supposed to learn.	3.00 (1.31)	3.00 (1.37)	3.26 (1.39)	2.71 (1.43)
2. After working on this activity for a while, I was confident that I would be able to pass a test on the material.*	3.70 (.79)	3.66 (.90)	3.48 (.95)	3.12 (.95)
3. I would like to learn more about organizational structure and motivation.	3.73 (1.31)	3.47 (1.24)	3.83 (1.03)	3.50 (.83)
4. I would like to participate in future learning activities that allow me to work with a group (by myself).	3.80 (1.19)	3.56 (1.44)	2.65 (1.27)	3.17 (1.27)
*5. I would have enjoyed this activity more if I had worked by myself (with a group). *	4.30 (1.18)	3.56 (1.46)	2.30 (1.40)	2.87 (1.48)
6. I would have learned more if I had worked by myself (with a group). *	4.33 (1.15)	3.56 (1.58)	2.65 (1.11)	3.00 (1.50)
7. When doing my homework assignments between classes, I prefer to work with a group (by myself). *	3.37 (1.40)	2.84 (1.27)	2.57 (1.21)	3.17 (1.40)
8. For classroom activities, working with a group (by myself) is best for me. *	3.90 (1.06)	3.59 (1.36)	1.83 (.98)	2.62 (1.31)

Note. Likert scale consisted of 1 = Not true, 2 = Slightly true, 3 = Moderately true, 4 = Mostly true, 5 = Very true. Scores on Items #5 and #6 were reversed to indicate satisfaction with the treatment condition experienced. Underlined items show where survey differed by treatment.

* $p < .05$

Table 2
Number of interaction behaviors exhibited by small groups.

Interaction behavior	Small Group type	
	High affiliation	Low affiliation
On-task group*	406	335
On-task individual*	123	87
Off-task	68	70

Note. Data are reported for a sample of 10 low and 10 high affiliation groups.

* $p < .05$

A vertical bar on the left side of the page, consisting of a series of yellow and orange rectangular segments. A small red diamond is located at the top of this bar.

COPYRIGHT INFORMATION

TITLE: Using Small Group Learning Strategies With Adult
Re-Entry Students

SOURCE: College Student Journal 37 no2 Je 2003

PAGE(S): 286-97

WN: 0315203829014

The magazine publisher is the copyright holder of this article and it is reproduced with permission. Further reproduction of this article in violation of the copyright is prohibited.

Copyright 1982-2004 The H.W. Wilson Company. All rights reserved.