

The Effect of Different Feedback Types on the Self Esteem of a Qatari Female Sample

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SUMMARY

The purpose of this study was to investigate the effect of verbal/written (A), Individual/group (B) types of feedback and their interaction (AB) on the self esteem of a Qatari female sample. The subjects were 68 undergraduates majoring in education and enrolled in the author's course on measurement and testing. They were selected and assigned randomly to the four treatments (verbal-individual, written-individual, verbal-group and written-group). Self-esteem was assessed before and after providing the subjects with feedback about their achievement. By using two-way analysis of covariance, it was found that there were non significant differences among the samples' means either due to treatment (A) or (B) or to their interaction (AB). Results were discussed from the cultural perspective, the experimental treatment and the subject's motivation.

أثر انماط التغذية الراجعة المختلفة على تقرير الذات لدى عينة من القطريات

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تلخيص

خضع تقدير الذات للعديد من الدراسات لما له من أهمية في دراسة الشخصية وفهمها وفي تفاعل الأفراد

الاجتماعي وتوافقهم . وقد درس تقرير الذات كمتغير تابع في دراسات متعددة . وتعتبر التغذية الراجعة من أهم المتغيرات المستقلة التي درست من حيث تأثيرها على تقدير الذات . وقد أجريت تلك الدراسات للوقوف على أثر تزويد الأفراد بمعلومات صحيحة أو خاطئة عن نجاحهم أو فشلهم في الأداء والتحصيل ، وعن سماتهم الشخصية كما تقاس بالاختبارات النفسية ، على تقديرهم لذواتهم .

من هذا المنطلق تحدد هدف الدراسة الحالية في التعرف على أثر التغذية الراجعة الشفهية - التحريرية من ناحية ، والفردية - الجماعية من ناحية ثانية ، والتفاعل بين هذه الأنماط على تقدير الذات لدى ٦٨ من طالبات كلية التربية بجامعة قطر .

أُختيرت عينة الدراسة عشوائياً من بين مجتمع حجمه ١٦٦ طالبة من المنظمات في مادة القياس النفسي والفروق الفردية في الفصل الدراسي الأول ١٩٨٢م . وقد تراوحت أعمارهن بين ١٨ - ٢٥ سنة بمتوسط ٢٠,٦ سنة وانحراف معياري ٤,١ . وُزعت الطالبات على المجموعات التجريبية الأربع التالية عشوائياً : شفهي - فردي ، تحريري - فردي شفهي - جمعي ، تحريري - جمعي .

يقصد بالتغذية الراجعة في هذه الدراسة تزويد الطالبات بمعلومات عن أدائهن على إختبار التحصيل الدراسي في مادة القياس النفسي والفروق الفردية . ويقصد بالتغذية الراجعة الشفهية الفردية التوضيح الشفهي للإجابات الصحيحة والخاطئة الخاصة بالطالبة وأسباب الصواب والخطأ . ويقصد بالتغذية الراجعة التحريرية الفردية التوضيح المكتوب للإجابات الصحيحة والخاطئة الخاصة بالطالبة وأسباب الصواب والخطأ . ويقصد بالتغذية الراجعة الشفهية الجماعية التوضيح الشفهي للأخطاء العامة التي وقعت فيها أكثر من ٥٠٪ من الطالبات وأسباب الخطأ ، ومتوسط الدرجات التي حصلت عليها الجماعة وانحرافها المعياري . ويقصد بالتغذية الراجعة التحريرية الجماعية التوضيح المكتوب للأخطاء العامة التي وقعت فيها أكثر من ٥٠٪ من الطالبات وأسباب الخطأ ، ومتوسط الدرجات التي حصلت عليها الجماعة وانحرافها المعياري .

لإجراء الدراسة أخبر الباحث الطالبات بالهدف من التجربة وأن الاشتراك فيها اختياري ولن يؤثر على درجاتهن التحصيلية ، وبذلك تحدد المجتمع الأصلي للعينة . بعد قيام الباحث بتدريس الوحدة المختارة طبق اختبار تقدير الذات على العينات الأربع (قياس قبلي) . أعقب ذلك تطبيق للاختبار التحصيلي الذي استخدمه الباحث لتقديم التغذية الراجعة الخاصة بكل عينة . وأعقب تقديم التغذية الراجعة مباشرة تطبيق مقياس تقدير الذات للمرة الثانية (القياس البعدي) .

باستخدام تحليل التباين التلازمي Covariance لمتغيرين تبين عدم وجود فروق في درجات تقدير الذات بين المجموعات الأربع سواء بالنسبة للتغذية الراجعة الشفهية - التحريرية ، أو الفردية - الجماعية ، أو لتفاعلها . وقد فُسرت النتائج في ضوء دافعية أفراد العينة والعوامل الثقافية المحيطة بهن ، وفي ضوء الطبيعة التجريبية للدراسة .

Self-esteem is one of the most important and heuristic concepts for studying personality because, as Allport (1937) suggested, it enters into all sentiments and traits, and as Crandall (Wells & Marwell, 1976) suggested, it is related to almost everything at one time.

It is considered by Maslow (1937) as one of the human needs. It relates also to and/or effects personality adjustment (Wells & Marwell, 1976), social interaction (Zander, Stotland & Wolfe, 1960) and subjects' achievement (Kifer, 1975; Lawrence, 1981; Maruyama, Rubin & Kingsbury, 1981).

Self-esteem has been studied as an independent variable in several studies, but as a dependent variable in only few studies. From the independent variables that effect self-esteem, feedback is a very important one. The following three areas are examples to clarify the effect of feedback on self-esteem.

First, this effect can be detected in defining self-esteem as a reflexive attitude and/or as a psychological response. Coopersmith (1967) used the term self-esteem to refer to the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval and indicates the extent to which the individual believes himself to be capable, significant, successful and worthy. In short self-esteem is a personal judgement of worthiness that is expressed in the attitudes the individual holds towards himself. It is a subjective experience which the individual conveys to others by verbal reports and other overt expressive behaviour.

Secondly, feedback effect on self-esteem can be detected in the clinical field. For example Roger's client centered therapy deals mainly with the client's self regarding attitudes and self-acceptance.

Thirdly, feedback effect can be found in the studies termed "self-esteem manipulations" (Wells & Marwell, 1976). Manipulations involve providing the subjects with positive or negative feedback either about their scores on personality tests, e.g. (Layne & Ally, 1980; Michels & Layne, 1980) or about their performance on experimental tasks, e.g. (Schunk, 1982). The following are some examples for "self-esteem manipulations."

After reviewing a series of studies about the effect of experimental failure on self-evaluation Diggory (1976) concluded that changes appropriate conditions, have far reaching effects on general self-evaluation.

On discussing self-esteem manipulation, Wells and Marwell (1976) reviewed several studies from which they concluded that the effects of negative manipulation are much marked for low than for high self-esteem subjects, while the effects of positive manipulations are the reverse. This holds for both task failure and personality feedback.

The effect of feedback on self-esteem was confirmed also by Ilgen (1971), Weaver and Brickman (1974) and McFarlin and Blascovich (1981). They examined subjects effective reactions to evaluative feedback. They found that individuals, regardless of their chronic levels of self-esteem, preferred success to failure probably to achieve self enhancement and self-regard.

Schunk (1982) conducted an experiment about the effects of effort attributional feedback, either for past or future achievement, on perceived self-efficacy. He found that attributional feedback for past achievement improved subject's achievement and led to higher percepts of self-efficacy.

The reviewed literature indicates that feedback effects self-esteem. But one of the questions that is still to be examined is: what is the effect of different types of feedback on subject's self-esteem? This is the problem which this study was designed to investigate.

The purpose of this study is to investigate the effect of:

- a. Verbal/written feedback (A) on the self-esteem of a sample of Qatari students.
- b. Individual/group feedback (B).
- c. The interaction (AB) between (A) and (B) treatments.

Feedback in this study means that the teacher provides the student with knowledge about the adequacy of his/her achievement responses, gives reasons for inadequate responses, the correct response, and reasons for the appropriateness of a response. If feedback is provided orally on a one to one basis, it is termed "verbal-individual." If it is provided in a written form on a one to one basis, it is termed "written-individual." If feedback is given orally and includes the common errors of the group (items which more than 50% of the students got wrong) with information about the achievement mean and standard deviation of the group, it is termed "verbal-group." It is given in a written form and includes the common errors in the group (items which more than 50% of the students got wrong) with information about the achievement mean and standard deviation of the group, it is termed "written-group".

Feedback about student's achievement was used because of the strong-reciprocal relationship between achievement and self-esteem (Purkey, 1970) and because Bachman and O'Mally (1977) viewed self-esteem is strongly linked to past academic performance, present academic ability and academic aspiration for the future.

METHOD

Subjects:

The population of this study consisted of Qatari undergraduate females majoring in education at the University of Qatar. All of them were in their junior year and enrolled in the author's course on measurement and testing during the first semester of 1982. The population size was 166 students.

The subjects were randomly selected from the stated population and randomly assigned in equal numbers to treatments.

The age range was 18-25 years with a mean of 20.6 years and standard deviation of 4.1 years.

The sample size was determined according to Cohen's (1977) procedure. To determine the size of each of the four samples, where $K = 4$ and $U = K - 1 = 3$, the power of the statistical test, and the desired effect size of the treatment must be given. For this study alpha selected is .01, the power of the statistical test is .99, and the selected effect size is .60. By using the tables and applying the formula developed by Cohen, the sample size that met the previous conditions was 17 in each cell. Therefore the total N was 68 subjects.

The effect size or the departure from the zero effect, in terms of standard deviations of the standardized K means, is selected at .60 because according to Cohen if the effect size is .10 it is considered small, or .25 it is considered medium and .40 it is considered large.

Design:

A 2×2 completely randomized factorial design was used. The independent variables are verbal/written and individual/group types of feedback. This design yields four samples: verbal-individual, written-individual, verbal-group and written group.

The dependent variable is self-esteem measured by a test developed and standardized before the experiment.

Instruments:

To measure self-esteem El-Dreny and Salama's (1982) test for self-esteem was used. This test adopted Coopersmith's definition of the general chronic self-esteem (Coopersmith, 1967). It consists of 30 items with a Likert type scale of 3 points. It was developed and standardized using a similar sample of Qatar University during 1980-1981. The split half reliability of the test was .76 and its construct

validity was confirmed by using criterion relational evidence method (Wells & Marwell, 1976) and Watkin's method (1978).

To measure achievement two multiple choice equivalent forms of an achievement test were used. Each form consisted of 25 items and it was content valid. Its reliability was .62 which is considered acceptable because of the variables that effect the equivalent forms reliability (Thorndike & Hagen, 1961).

To provide the students in the two written groups with feedback, a written answer sheet with comments about the correct response and the inappropriateness of other alternatives were prepared. The answer sheets differed according to the two kinds of written treatments used.

Procedure:

Since this study was conducted at the beginning of the course none of the subjects in the sample have had any formal instruction in measurement and testing. The population were told that they were involved in a study about feedback and that their participation was voluntary and would not affect their course grade.

After teaching the selected unit by the author, the self-esteem test was administered to the samples. Their scores on this test were considered as a pretest.

The student's achievement was examined. Then, each sample received their graded tests followed by the proper feedback by the author.

Immediately following feedback the self-esteem test was administered by the author for the second time. That was considered as post-test.

Two-way analysis of covariance (Bruning & Kintz, 1968) was used to analyze the scores on the post-test which were used as a dependent variable. While the scores on the pre-test were used as a covariate.

RESULTS

Since there is no previous research about the effect of the two treatments selected and their interaction on the student's self-esteem in Qatar, the following null hypotheses were tested.

1. There are no statistically significant differences among the samples' means on self-esteem test due to treatment (A).
2. There are no statistically significant differences among the samples' means on self-esteem test due to treatment (B).

3. There is no statistically significant interaction (AB) between (A) and (B) treatments.

On analyzing the data the three null hypotheses were accepted. Table (1) includes the results of the analysis and Table (2) presents the means and standard deviations for the four samples.

Table (1)

Analysis of Covariance for self-esteem scores

TABLE (1)

Analysis of Covariance for self-esteem scores

Source	Adj. SS.	D.F.	MS	F	Sig.
(A) Verbal/Written	123.9	1	123.9	3.62	Non
(B) Indiv./Group	71.4	1	71.4	2.08	Non
(AB) Interaction	.001	1	.001	.00003	Non
Error	2159.1	63	34.27		

TABLE (2)

Samples' means and standard deviations for self-esteem scores

A		Verbal		Written	
B		Pre	post	pre	post
Individual	X	72.4	74.12	71.4	71.1
	S.D.	4.65	5.3	6.96	8.8
Group	X	73.4	76.4	73.8	73.9
	S.D	5.3	3.3	5.28	4.6

The analysis indicated that treatment (A) did not significantly affect the dependent variable, or whether feedback was provided in a verbal or written form, it did not lead to significant differences among the samples' means. Also, treatment (B) did not significantly affect the

dependent variable, or whether feedback was provided in an individual or group form it did not lead to significant differences among the samples' means. Besides the interaction between (A) and (B) treatments was not significant, or that the interaction between the two types of feedback did not lead to significant differences among the samples' means.

DISCUSSION

Before dealing with the non significant effects of feedback types, the effect of feedback on Qatari females self-esteem must be examined.

By using test for correlated samples, it was found that feedback did not significantly affect the sub-samples scores, and Table (3) shows the results.

TABLE (3)

t test for pre-post scores in each cell

	A	Verbal		Written
B	t	Sig.	t	Sig.
Individual	1.4	Non	.13	Non
Group	1.77	Non	.08	Non

From Table (1) and (3) it can be concluded that feedback and feedback types did not significantly affect the samples means on self-esteem test.

These results can be interpreted from the cultural perspective, the frequency of experimental manipulation, subjects' motivation, the nature of feedback used and the artificial isolation of self-esteem.

First, since the culture affects individuals' self-esteem the obtained results can be interpreted from the cultural point of view. Qatar is a country in transition, a country in which the way of life is changing. The impetus for change first came with the exploitation of oil with its complex technology and the affluence which is brought to the society (Melikian, 1981). Also, through the frequent travel, mass media and contact with a large number of expatriates from different cultures who are working in Qatar. Qataris have, since the early fifties become more aware and exposed to different cultures.

This has probably contributed to some changes in the Qatari female's self-esteem in one way or another.

One aspect of this change can be seen in the family structure. The family changed from the extended to the nuclear (Melikian & Al-Easa, 1981; El-Adly, 1982). Consequently mothers, and not grandmothers or aunts, are now completely and independently responsible for managing their homes and rearing their children with the help of several male and female servants from different cultures.

Another aspect of change is reflected in Qatari males' attitudes towards females. Although the culture takes the superiority of the male for granted (Melikian, 1981), males' attitudes towards females have changed. El-Shekh (1978a) found that Qatari undergraduate males are no longer considering females as less intelligent or less experienced. They also agreed that females must get their full political and educational rights. Not only that but they agreed that the girl must also have the right to refuse her betrothed man.

Values, as self-independence and the role of education and work, are the third area of cultural change. El-Shekh (1978b) with a sample of Qatari males and females found that education has changed several values and self-independence was one of them. That change was significant for secondary school and University students.

El-Asar (1978) found that 84% of her female undergraduate sample (N = 46) saw that education is the way to successful and prosperous future. Adding this to the cultural principle that teaching is the main, or the only profession for females may lead to the following conclusion. Qatari females may have high positive attitude towards teaching. This conclusion is supported by Gaber and El-Dreny's (1982) and Al-Easa's (1982) findings. They found that secondary school girls and undergraduate females had high positive attitude towards teaching as compared with other professions. Consequently, mere joining the College of Education may affect females self-esteem.

With the affluence that the Qataris are enjoying, the females' motives for work is not economic but is directed towards personal and psychological satisfaction (Melikian & Al-Easa, 1981, Al-Easa, 1982). Considering that positions are guaranteed by the government, and with higher salaries compared with salaries paid to other nationalities in the same position, would also have affected their self-esteem.

The conclusion that can be drawn out from the above mentioned cultural changes is that feedback and feedback types **might have not affected** the

sample's self-esteem because their chronic self-esteem has been previously shaped by the cultural changes.

Secondly, the frequency of the experimental manipulation might not have been enough to affect the subject's self-esteem. Stotland et al (1957) reported that self-esteem is an enduring personality characteristic which the subjects bring to the experimental setting. Therefore it is probable that it would not be affected by one experimental experience. This inference was confirmed by Kinch (1968) because he reported that a single instance of feedback is much less effective than repeated experiences. Again this inference was experimentally confirmed by McFarlin and Blascovich (1981). They found that one feedback treatment did not lead to changes between subject's pre-test and post-test measure of their chronic self-esteem. Even when faced with unexpected performance feedback (i.e. failure for individual with high self-esteem and success for the individual with low self-esteem), subjects' chronic levels of self-esteem remained stable.

The conclusion that can be drawn out from the second section is that feedback and feedback types might have not affected the samples self-esteem because an individual's chronic level of self-esteem is an enduring personality characteristic based on cumulative experiences and, therefore, one single treatment may not affect it.

Thirdly, student motivation — as an intervening variable — might have interfered with the experimental treatment and led to the non-significant results obtained. The subjects were students enrolled in the author's course on measurement and testing. One of the course requirements was to apply tests on themselves, score and interpret the results. This might have affected the subjects' motivation in a way that they considered their participation in the experiment would affect their course grade, and this situation might, in turn, have interacted with the subject's social desirability and led to the obtained results.

Fourthly, as for the nature of feedback used, the experimental manipulation included providing the four samples with objective and positive/negative feedback related to the subject's performance. This type of feedback, that was task specific, may have a limited influence on self-esteem, compared with personality feedback (Wells & Marwell, 1976). Besides this task specific feedback was limited while self-esteem measure was much more general. This means that feedback and feedback types might have not affected the sample's self-esteem because feedback used was objective, positive/negative and specific to certain performance while self-esteem measure was general.

Finally, feedback and feedback types might have not affected the

sample's chronic self-esteem because self-esteem is embedded in a whole syndrome of correlated variables (i.e. depression, withdrawal, intelligence, ability to cope ...etc.) in contrast to the relatively pure and artificial variation of isolated self-esteem experimental manipulation (Wells & Marwell, 1976).

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