

SELFCONFIDENCE AND WORD-OF-MOUTH

**The Influence of Self-confidence on
Word-Of-Mouth in Offline and Online environments**

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INTRODUCTION

Firms are seeking opportunities to be competitive in today's consumer markets. One way that offers a distinct point of advantage is positive word-of-mouth (WOM). According to Aslop (1984) word of mouth is the most important marketing element that exists. It is particularly important in the service context, due to the fact that services are intangible (Murray, 1991). Another advantage of WOM suggested in the literature is that WOM is nine times as effective as traditional advertising in converting unfavourable intentions into positive attitudes (Day, 1971). WOM entails two parties, namely the communicator (speaker) and the receiver (listener) (Dichter, 1966). This research focuses on the communicator side of WOM, especially on the personality dimension of the communicator, namely self-confidence.

In the literature many authors have written about WOM and other related issues (Lau, 2001, Day, 1971, Westbrook, 1987). Also many papers are written about the viral marketing and the traditional marketing environments (Thevenot and Waiter, 2001; Rasmusson, 2000). Those two topics are often combined in other researches (Thevenot and Waiter, 2001; Datta 2005). These authors conclude that viral marketing is the modern edition of WOM.

But if individual aspects of consumers, which are the deciding factors that turn into WOM (Lau and Sophia, 2001), are the same in a viral environment and offline environment is not investigated. This research focuses on the self-confidence aspect in these two environments.

Problem statement

How does the consumers' self-confidence affect word-of-mouth behaviour, in online versus offline environments?

Managerial relevance

Because WOM in today's business is a very important issue it is good to be aware of the different situations in which you can use this marketing tool (Aslop, 1984). Self-confidence can have a different influence, in either the offline or the online environment, on WOM and therefore this research is of high importance for business life (Thevenot and Waiter, 2001).

Theoretical relevance

In the literature both the online vs. offline environment as the WOM behaviour is discussed (Thevenot and Waiter, 2001). Cox & Bauer (1964) discuss the self-confidence aspect of consumers. But if self confidence which is a deciding factor that turns into WOM, is the same in a online environment and offline environment, is not investigated.

Hypotheses and theoretical background

In this study, the focus is the communicator side of WOM and particularly on the individual factor self-confidence and the difference of WOM behaviour in online versus offline environment.

Self-confidence: general self-confidence is defined as the extent to which an individual believes himself to be capable, significant, successful and worthy (Coopersmith, 1967).

Online environment: marketing communication/activities in an Internet setting

Offline environment: all marketing communication/activities in a non-internet setting.

Word-of-mouth: in a post purchase context, consumer word of mouth transmissions consist

of informal communications directed at other consumers about the ownership, usage, or characteristics of particularly goods and services and/or their sellers (Westbrook, 1987, p.261)

Past research revealed evidence for a relationship of self-confidence with WOM (Cox and Bauer, 1964; Locander and Hermann, 1979). According to Day (1978) consumers who complain tend to be more self-confident and assertive. This could result in a negative WOM behaviour. Thus it is proposed that those consumers who are in high-confidence would have sufficient assurance to discuss experiences with others.

H1: Participants who are more self-confident, are more likely to engage in WOM behaviour than those who are less self-confident

Today's internet applications make it possible to reach consumers all over the world. It is also easier to communicate because consumers do not communicate directly with each other as in an offline environment. This results in the following hypothesis:

H2: Participants in an online environment are more likely to engage in WOM behaviour than those in a traditional environment.

When people are not confident, the intention to engage in WOM behaviour in an offline environment will be lower than in an online environment. In an offline environment there is face to face communication between people and therefore consumers need to be capable, significant, successful and worthy to engage WOM behaviour. In an online environment communication between consumers is easier and could also be done anonymous. This leads to final hypothesis:

H3: Participants with low self-confidence, are more likely to engage WOM in an online than an offline environment, and participants with high self-confidence, do not significantly differ in their intention to engage in WOM in an online versus an offline environment.

The predicted results and conceptual model are presented in appendix a.

METHOD

Participants and experimental design

Decided is to use a 2 (setting: online vs offline) x 2 (self-confidence: high vs low) factorial design based on a mixed model. This model contains the setting as within-participants factor, and self-confidence between-participants factor. The first is chosen to be within-participants to minimize the risk of external influences and influences of participants' characteristics. The latter is chosen because the participants are assigned to the different conditions afterwards by means of a median-split.

The experiment will use a post-test only, with the offline condition as control group and the online condition as experimental group. The pre-test is excluded to avoid an interactive testing effect, and save time and money. Moreover the popular reasons to incorporate the pre-test (e.g. test for ceiling effect, test for initial position and obtain evidence of change) are not applicable for this research.

The participants will be selected from the participant pool of students from Tilburg University. These students are motivated to participate in a research study because they are offered this activity as an alternative to some other requirement in one of their courses. The authors accept the disadvantage that the sample will consist only of highly educated participants. The minimum number of required participants for this experiment is 40 (2 between-participants conditions x 20 participants per condition, because the effect size is unknown a rule of thumb is used). The participants are not randomly assigned to conditions because of the within-participants design for the setting (online/offline) and because of the measurement of the self-confidence (median-split). To control for sequencing effects, complete intragroup counterbalancing is used. Each participant will see two commercials per setting (online/offline). These commercials are matched so that the same product group will be shown twice, once online and once offline.

Variables

Manipulation and pre-testing of IV

The setting will be manipulated to replicate an online versus an offline environment. The offline environment is created by letting participants view a pretested WOM educating commercial on a TV. Additionally they are told to imagine themselves in an offline environment. The online environment will be created by letting participants view a pretested WOM educating commercial on YouTube. The pretesting ensures that the commercials are comparable. Additionally they are told to imagine themselves in an online environment. Self confidence will be measured by means of a questionnaire after the experimental conditions. From the participants and experimenters' point of view this will be perceived as a second, separate and unrelated experiment. The questions will be derived from the Self-Confidence (generalized) scale by (Davis, 1983; Lumpkin, 1989) from the Marketing Scales Handbook (Bruner & Hensel p.535-537). Responses were based on 7 items measured by a 7-point Likert-type scale, anchored by strongly disagree (1) and strongly agree (7), see appendix d. An alpha of .87 was reported for the scale by Lumpkin and Hunt (1989). For the analysis, the groups (high/low self-confidence) will be determined by a median-split. The questions will be pretested to assess validity.

Measurement of DV

The concept of WOM is expressed as the likelihood that the participant will engage in WOM behaviour. The scale that will be used to measure this variable is adapted from Jean Harrison-Walker (2001). Responses were based on 6 items measured by a 7-point Likert-type scale, anchored by strongly disagree (1) and strongly agree (7), see appendix c. In previous research the scale was found to be reliable (alphas of .804 and .7802 reported by Jean Harrison-Walker; 2001).

Errors: participant, measurement and experimenter errors

Errors in the DV related to participants will be controlled. Disinterest of participants will be controlled because (1) the videos are pretested to be interesting to the participants, and (2) in real-life setting people are also not fully committed when watching a (viral) video. Reactivity of participants is controlled by getting participants more committed. As mentioned before

students are motivated to participate in the study because they are offered this activity as an alternative to some other requirement in one of their courses. This unfortunately may reduce external validity. To counter positive self-presentation participants are told, in the introduction of the experiment, that only their opinion is important and that there are no good or bad answers. To make sure that participants are not influenced by the purpose of the study, each individual is asked after the experiment about what they think the purpose of the experiment was. Participants who guessed the purpose of the study are excluded from further analysis. The aim of the study is disguised. Participants are told that there are two separate and seemingly unrelated experiments (two shortcuts on the desktop). Two cover stories are used. One is a sort of examination of the population regarding self-confidence, the other is the liking of several videos/commercials.

Errors in the DV related to the experimenter are also controlled. The experiments are behind a computer and instructions will be on paper. The experimenter just explains the broad setting of how to participate and does not know the conditions or what is to be tested (expectancy effect is controlled and blind technique is applied). The researcher will not be present at the location. To control for recording errors, the answers will require two actions of the participant, selection of the answer and a 'save & continue' button, a back-button is not present to avoid that participants change their mind and change answers.

Errors in DV related to measurement are all performed afterwards. To test the reliability of the scales, the Cronbach's alphas will be calculated, after which the split-half test will be performed.

Procedure

When participants enter, they get a number which is randomly assigned to a specific condition order for the experiment. Next the participant is individually given instructions about the procedure and how to conduct the two experiments by the experimenter. Then the participant is placed in a special cabin, which contains one computer and one television. On the desktop of the computer are 2 shortcuts, one for each experiment (one is the WOM in the online/offline condition, the other is about the self-confidence). Afterwards the participants must fill-out one more questionnaire to find out if they have guessed the aim of the study. Finally they are thanked and have to sign a list to get the reward/credits.

RESULTS AND DISCUSSION

Data analysis and resultsⁱ

First the answers of the participants to the control questions for determining if they have guessed the aim of the study were checked. Participants who have guessed the aim were eliminated from further analysis. Second the data was coded into SPSS. Finally the acquired data was analysed for missing values, outliers and invalid data. These were not found.

To test the hypotheses in combination with this design, a two-way mixed ANOVA (Repeated Measures) test was used in SPSS. First the assumptions for this test were checked. This indicated that the scores in all conditions were normally distributed. Homogeneity of variance was tested for self-confidence (between participants factor) using the Levene's test; the

variances of scores were equal across different conditions. Finally because setting (within participants factor) has only 2 levels, sphericity was not an issue.

Next the main effects were tested. Setting had a significant main effect on WOM ($F(df)=...$; $p<.001$). Participants engaged more in WOM in the online environment ($M=...$; $SD=...$) than in the offline environment ($M=...$; $SD=...$).

Self-Confidence had a significant main effect on WOM ($F(df)=...$; $p<.001$). Participants engaged more in WOM when self-confidence was high ($M=...$; $SD=...$) than when self-confidence was low ($M=...$; $SD=...$).

The analysis revealed a significant Setting x Self-Confidence interaction ($F(df)=...$; $p<.001$). Whereas the WOM did not depend on Setting for Self-Confidence in the high condition ($F(df)=...$; $p=...$), Setting significantly affected the WOM for Self-Confidence in the low condition ($F(df)=...$; $p<.001$). Specifically, participants with low self-confidence that were exposed to the online condition ($M=...$; $SD=...$; $p<.01$), engaged more in WOM than participants in the offline condition ($M=...$; $SD=...$; $p<.01$).

A graphical representation of the results can be found in appendix A, figure 2, 4 and 5. Because the interaction is significant, the simple effects was examined using overall simple effects tests.ⁱⁱ This test revealed there was a significant effect of setting in the low self-confidence condition, but no significant effect of setting was found in the high self-confidence condition.

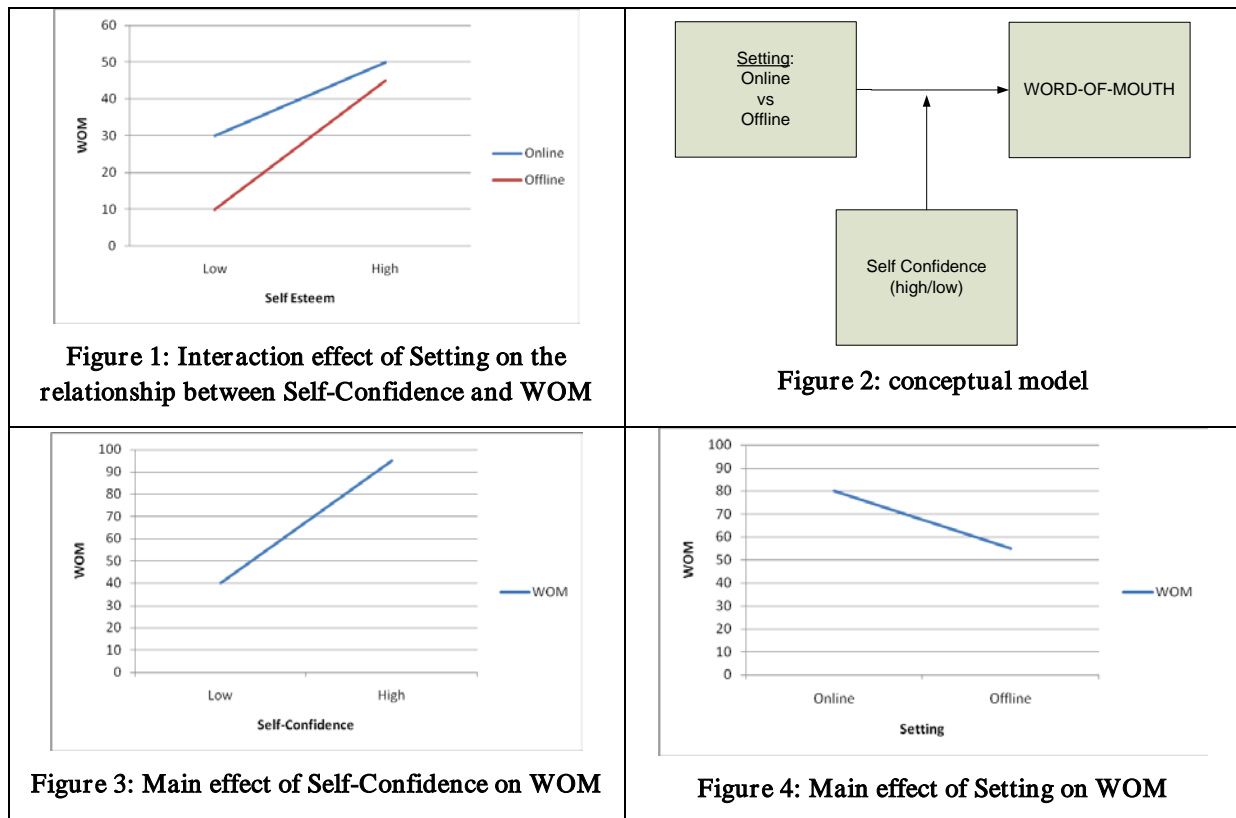
Limitations

During the preparation of the experiment the measurement errors and numbers of participants are taken into account, so the experiment is expected to be reliable. The scales of the questionnaire are adopted from the Marketing Scales Handbook (Bruner, 1992) and therefore they are expected to be consistent.

Validity problems contain different confounding threats. Confounding occurs when the experiment contains a variable that systematically varies with the independent variable. In this research the selection and attrition threats arose. Selection: Because only university students are used, there is a possibility that the participants in the sample have a higher self-confidence level than people in the population. This could have implications for the median-split. Attrition: Some students will not show up to fill in the questionnaire, because they are not interested to participate. External validity: (1) Ecological validity, it is hard to create an offline and online environment like in real life and create an offline and online setting by only using a television and computer in the setting. (2) Temporal validity the extent to which the results can be generalized across time, for example the differences between the results of the participants in the morning or the evening.

The research did not investigate the influence of attitude of the participants on WOM. Furthermore participants could be stressed, hurried, tired or other relative moods that make them not talking about the commercials. Future research could also investigate differences in the amount of WOM (like number of people), the time before people engage in WOM, and what instruments/tools people use to engage in WOM behaviour.

APPENDIX A



APPENDIX B

Original Set of Items Generated to Measure Word of Mouth (WOM) by Jean Harrison-Walker (2001)

1. I mention this service organization to others quite frequently. a
2. I've told more people about this service organization than I've told about most other service organizations. a
3. I seldom miss an opportunity to tell others about this service organization. a
4. I've told very few people about this service organization. (R)
5. When I tell others about this service organization, I tend to talk about the organization in great detail!
6. I have only good things to say about this service organization.
7. I am proud to tell others that I use this service organization. b

NOTE: Responses were based on a 7-point Likert-type scale, anchored by strongly disagree (1) and strongly agree (7). (R) = reverse scored.

a. Identified as WOM Activity items.

b. Identified as WOM Praise items.

APPENDIX C

Set of Items Generated to Measure Word of Mouth (WOM).

Adapted from Jean Harrison-Walker (2001)

After watching this video.....

1. ... I mention this video to others quite frequently.
2. ... I tell more people about this video than I've told about most other videos.
3. ... I seldom miss an opportunity to tell others about this video.
4. ... I tell very few people about this video. (R)
5. ... when I tell others about this video, I intent to talk about the video in great detail!
6. ... I have only good things to say about this video.
7. ... I am proud to tell others that I use this video.

NOTE: Responses were based on a 7-point Likert-type scale, anchored by strongly disagree (1) and strongly agree (7). (R) = reverse scored.

APPENDIX D

Adapted from Self-confidence (generalized) + scale from the Marketing Scales Handbook vol I by Bruner & Hensel.

1. I think I have more self-confidence than most people.
2. I am more independent than most people.
3. I think I have a lot of personal ability.
4. I like to be considered a leader.
5. I have never been really outstanding at anything. (r)
6. I often can talk others into doing something.

NOTE: Responses were based on a 7-point Likert-type scale, anchored by strongly disagree (1) and strongly agree (7). (R) = reverse scored.

APPENDIX E

Graphical representation of the data for the 2x2 mixed factorial design

WOM			Setting	
			Online	Offline
Self-Confidence	High	Part 1		
		Part 2		
		Part 3		
		Part 4		
		Part 5		
	Low	Part 6		
		Part 7		
		Part 8		
		Part 9		
		Part 10		

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NOTES

ⁱ Because data was not acquired and actual analysis was thus not performed, no figures are available.

ⁱⁱ Source: http://www.upa.pdx.edu/IOA/newsom/dal/ho_mixed.pdf [03-03-'09]