



**STUDY OF THE GENERAL PUBLIC'S PERCEPTION OF
MATERIALS PRINTED ON RECYCLED PAPER**

A study commissioned by the Initiative Pro Recyclingpapier

November 2005

INTRODUCTORY REMARKS

TNS Emnid, Bielefeld, herewith presents the results of a Germany-wide representative survey commissioned by the Initiative Pro Recyclingpapier.

The study examines how the population of the Federal Republic of Germany perceives the *LTU Magazine* and material printed on recycled paper.

The study was performed by TNS Emnid, Bielefeld. A total of 2,022 persons was surveyed. The survey was conducted as a monadic test via computer-aided personal interviews (CAPI). 1,005 persons received Version 1 (*LTU Magazine* on virgin paper), while 1,017 persons received Version 2 (*LTU Magazine* on recycled paper). Both groups were surveyed using the same questionnaire.

The papers used were UPM Star for the standard issue of the *LTU Magazine* and Steinbeis Charisma for the special issue on recycled paper. Both have a basis weight of 70 g/m²; UPM Star has a whiteness of 92% and Steinbeis Charisma a whiteness of 82%.

The representative cross-section which the participants in Germany reflect, permits the results of this study to be generalised for the German population as a whole.

The field work was performed between 21.10. and 01.11.2005. TNS Emnid, Bielefeld, was responsible for analysing the data and reporting on it.

TNS Emnid

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Main Results of the Study

The quality of the paper has no relevant influence on readers' level of satisfaction. The LTU Magazine was received equally positively by both groups.

1. Assessment of the *LTU Magazine* in regard to the following aspects:

- Relationship between text and image
- Layout, formal design
- Colouring
- Information content
- Font type and font size
- Organisational clarity
- Scope of magazine (number of pages)
- Format of magazine (size of the pages)
- Design of cover page
- Illustrations / photographs
- Selection of themes
- Paper quality
- Texture

General assessment:

The *LTU Magazine* was well received. Clear proof of this is evidenced by the fact that two-thirds of those surveyed assessed all aspects to be evaluated as good or very good. Five aspects received this assessment from three-quarters of study participants or more. These include paper quality with 79% of assessments as good or very good as well as the quality of the illustrations and photos with 77% of assessments as good or very good.

Negative or rather negative assessments of the two magazine variants – independent of the type of paper used – were seldom. Only between 2% and 4% of participants in

both groups, thus a marginal number, rated aspects as merely “adequate”. If one compares the negative rating scale items “poor” and “inadequate”, it becomes evident that these ratings were assigned by at most one per cent of those surveyed for the aspects considered here and can thus be disregarded.

Comparison of recycled paper / virgin paper assessments:

A broad majority of participants assessed all aspects as positive, regardless if they were presented with the version of the magazine on recycled paper or on primary fibre paper. If one compares those for whom the type of paper used could be of greater importance, it is notable that the version of the *LTU Magazine* printed on primary fibre paper was evaluated as slightly more positive. The differences in the assessment are not significant for most points, however, and all aspects were rated as “good” in accordance with the school marking system.

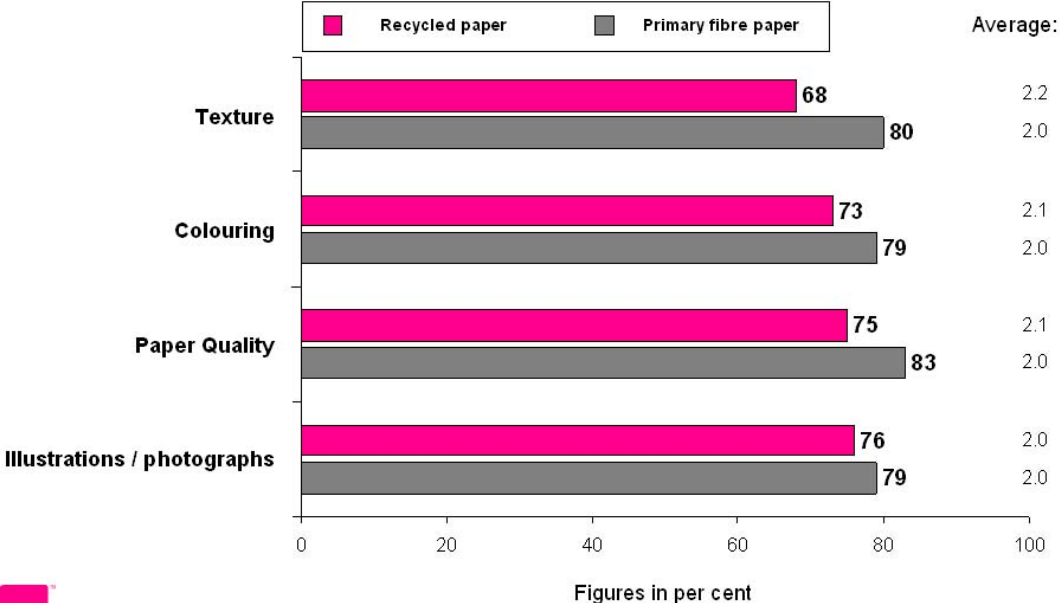
Both variants were likewise rated as “good” regarding the direct question of paper quality. The average assessment in accordance with a school marking system of 1 to 6 reveals only a minimal difference of 2.1 for primary fibre paper as compared to 2.2 for recycled paper. The assessment of the illustrations and photographs can in fact be regarded as equal with a difference of just 3 percentage points (identical average of “good” – 2.0). The question of texture also reveals that the vast majority of those surveyed in both sub-groups said that the magazine feels good or very good to the touch when reading. Just 6 per cent more of survey participants who viewed the primary fibre paper variant of the magazine assessed the colouring as good or very good. The minor differences described are attributable to the fact that a small number of persons in the group which viewed the magazine on recycled paper tended to assign the rating “adequate” somewhat more frequently.

Conclusion:

It can thus be concluded that the illustrations, paper quality, colouring and texture of the *LTU Magazine* were assessed as generally positive, regardless of on which paper it was printed. Minor differences dependent on the type of paper are evident only in that the variant printed on recycled paper is rated as “adequate” somewhat more often. While the magazine printed on primary fibre paper obtained an average of exactly 2.0 for all four evaluation criteria, the version printed on recycled paper obtained ratings of only one-tenth less (2.1) for colouring and paper quality. It received a rating of 2.2 for texture, meaning that only a very small difference is to be

noted here. Negative assessments were seldom for both variants. This establishes that the quality of the paper has no relevant influence on readers' level of satisfaction.

Assessment of the LTU Magazine in regard to paper, photographs, colouring and texture



Figures in per cent
Presentation of the top-two values

Social and Opinion

2. Evaluation of the *LTU Magazine* in regard to quality

The type of paper has no influence on the perceived quality of the magazine.

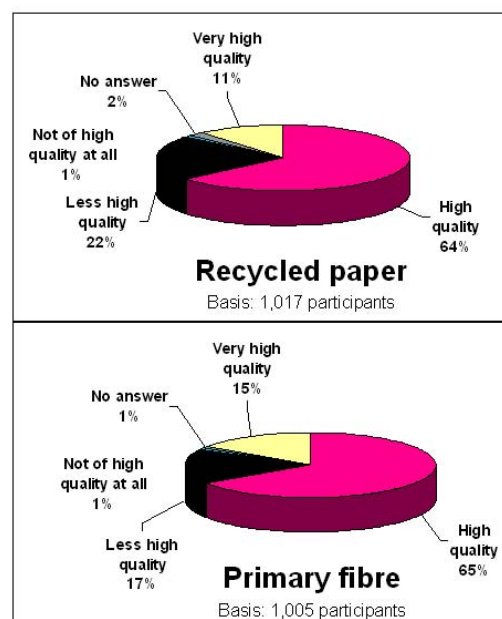
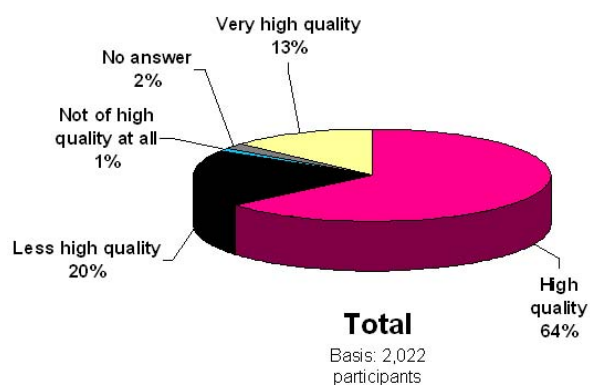
General assessment:

When asked how they assess the *LTU Magazine* overall in terms of quality, the survey participants were once again extremely satisfied. A total of 77% of those surveyed, thus more than three-quarters, described the magazine as of high quality or very high quality. Only 1% assessed the magazine as not at all of high quality.

Comparison of recycled paper / primary fibre paper assessments:

This pleasingly positive evaluation of quality does not change when the two sub-groups are viewed separately, i.e. those presented with the magazine on recycled paper respectively primary fibre paper. Only minimal differences are evident between the two groups. While three out of four survey participants who viewed the *LTU Magazine* on recycled paper rated it as of high quality or very high quality, this figure was 80% for those who viewed it on primary fibre paper. The type of paper used thus makes no difference in the overall assessment of the quality of the magazine.

Overall assessment of the *LTU Magazine* in regard to quality



3. Recall and impact of advertising

The survey participants who viewed the primary fibre and recycled paper versions can recall the adverts in the magazine equally well and give them virtually identical assessments.

General

The test persons were asked which advertisements they could recall after leafing through the *LTU Magazine*. The various types of advertising for LTU as the publisher of the magazine naturally received the best evaluations. Four out of ten survey participants (42%) were aware that the magazine contained advertisements for the tour organiser.

Results for recycled paper / primary fibre paper in comparison:

44% of those who viewed the issue on primary fibre paper mentioned the company, a slightly higher figure than in the other group. 21% of both groups recalled advertising for the LTU board shop, while the equally well recalled advertising for the mobile communications provider E-Plus (23%) was in fact 5% better among those who viewed the recycled paper issue.

A more detailed evaluation of a specific advertisement for LTU was requested in a second step. The results for the two types of paper are virtually identical here as well. 60% of those who viewed the primary fibre paper issue as compared to 59% of those who viewed the recycled paper issue rated the information content of the advert as very good or good. Expressed in school marks, both groups assessed the visual design of the advert as "good" with a rating of 2.3.

Conclusion:

The advertising customers frequently so important in financing publications and magazines need not worry about printing on recycled paper. The findings prove that there are no significant differences in recall or assessment of the adverts. There are differences for individual adverts, but on average they offset each other in such a manner that it can be said that both types of paper are equally suitable.

4. Awareness and assessment of the type of paper

The participants did not cognitively recognise the difference between recycled paper and primary fibre paper.

In the first step, the study participants were asked if they could identify on which type of paper (fresh-fibre or recycled paper) the magazine they were viewing was printed.

General results:

It was very difficult for the participants to tell which type of paper was used in the production of the *LTU Magazine* which they were viewing. Many of the participants – one out of four (24%) of those viewing the “normal paper” and one out of five (19%) of those viewing the version on recycled paper – did not feel they could make a judgement call.

Results for recycled paper / primary fibre paper in comparison:

The distribution of answers in the two groups was very similar. Regardless of which version they actually viewed, more of those surveyed believed that recycled paper was used in its printing – 45% in the group which actually had such an issue and 41% of those who were given a primary fibre version. In contrast, approximately the same number of survey participants from both groups (35% and 34% respectively) believed that the magazine was printed on wood-free, white paper.

It is thus evident that the participants recognise recycled paper as such somewhat more often. If one considers the high percentage of those who identified the type of paper used incorrectly or do not want to make a judgement, it can be assumed that the majority of persons cannot cognitively recognise the difference between recycled paper and primary fibre paper.

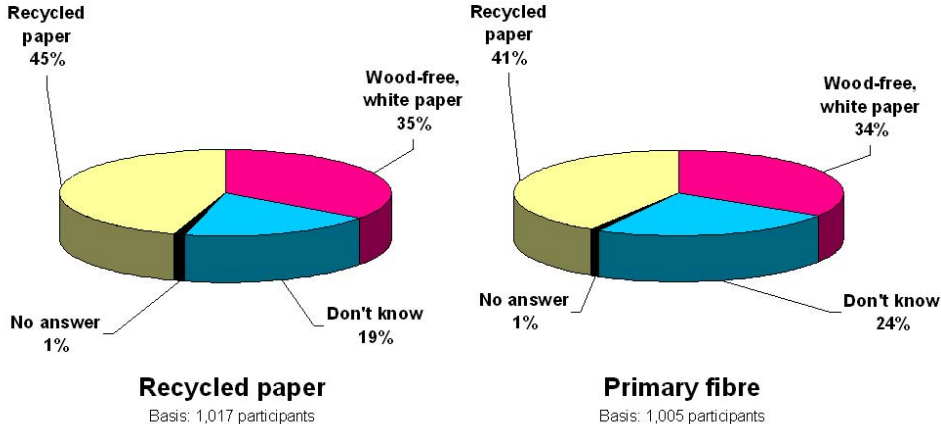
When the participants in the corresponding sub-group were informed that the *LTU Magazine* they were viewing was printed on recycled paper, the majority of those questioned (six out of ten persons or 59%) was surprised. That is a slightly lower figure than the number of study participants who indicated that the magazine was printed on primary fibre paper, did not want to make a judgement or provided no answer (a total of 55% altogether) for the preliminary question.

At the same time only 38% were not surprised – even though 45% had correctly identified the recycled paper in the previous question. A number of study participants were thus surprised to have answered the question correctly after all.

Conclusion:

The results reveal that the study participants have great difficulty in distinguishing between fresh-fibre paper and high-quality recycled paper.

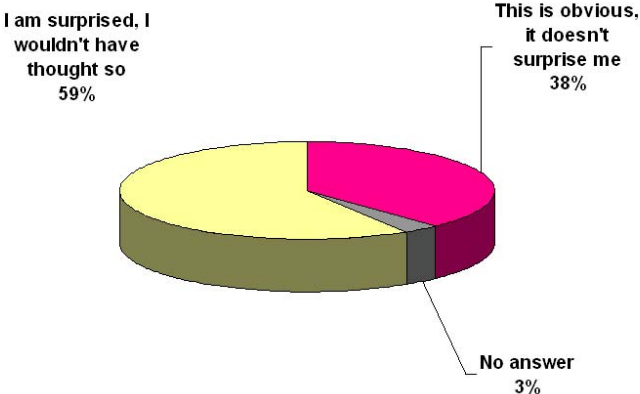
Type of paper study participants think they are viewing



Social and Opinion

Recognition of recycling paper usage

Sub-group: recycled paper version
Basis: 1,017 participants



Social and Opinion

5. Evaluation regarding use of recycled paper

The vast majority welcomes the use of environmentally friendly recycled paper.

The following statements could be affirmed or negated:

- Recycled paper should be used as often as possible in printing publications and magazines due to the environmental benefits that it offers.
- Recycled paper should definitely be supported as long as it has a high degree of whiteness.
- I feel better when I know that I am buying a magazine / a newspaper printed on recycled paper.
- Recycled paper is worthy of support, but only to a certain extent. It is not suitable for all magazines / newspapers.
- I don't care what type of paper is used for a magazine. The content is what matters.
- A high-quality magazine cannot use recycled paper. That conflicts with my aesthetic sensibilities.
- I am generally not convinced of the purported environmental benefits of recycled paper.

General assessment

Overall, one out of every two persons surveyed was of the opinion that recycled paper should be used in printing newspapers and magazines as often as possible due to the environmental benefits that it offers. 35% were in favour of definitely supporting recycled paper when it has a high degree of whiteness and three out of ten persons surveyed feel better when buying a magazine that is printed on recycled paper. Only a small minority (5–7%) was generally not convinced of the environmental benefits of recycled paper and regards their aesthetic sensibilities as being injured when a high-quality magazine is printed on recycled paper.

Results for recycled paper / primary fibre paper in comparison:

Most of the statements obtained similarly high affirmation values from the two sub-groups presented with different versions of the magazine. An approximately equal number of participants in both groups thought that the use of recycled paper with a high degree of whiteness should definitely be supported and feel better when they know they are buying a magazine printed on recycled paper. The number of persons who do not believe in the environmental benefits of recycled paper and whose

aesthetic sensibilities are injured by the use of recycled paper in high-quality magazines is very low in both groups.

The answers from the two groups differed somewhat more strongly for only two of the statements. Affirmation of the statement that recycled paper should be used as often as possible in printing magazines due to the environmental benefits it offers was somewhat stronger in the group that viewed the *LTU Magazine* printed on primary fibre paper. This statement is nevertheless the one which receives the strongest affirmation by far from both sub-groups. The participants from the two groups also varied in their affirmation of the statement that recycled paper is not suitable for all magazines or newspapers. This opinion was expressed somewhat more frequently by the study participants who viewed the recycled paper version. In total, however, only a minority of this group (approximately a quarter of those surveyed) affirmed this statement.

Conclusion:

Overall, the paper used for the *LTU Magazine* does not influence the stance which the participants take on the individual statements regarding recycled paper. The vast majority welcomes the use of environmentally friendly recycled paper.