%DVHG RQ WKHVH ÀQGLQJV LW LV VXJJHVWHG WKDW GHFUHDVHG LQ in left hemisphere language activity are caused by GHÀFLWV LQ SHUIRUPDQFH under the influence of AVH.

Apart from the small sample size, this study has another limitation. The group of schizophrenia patients existed of 9 males and only one female participant, while the group of healthy people with AVH comprised only one male participant. This was due to the fact that most schizophrenia patients volunteering were males and almost all healthy participants that responded to our website females. Furthermore, of the schizophrenia patients volunteering for this study, all but one woman had to be excluded because of scanner anxiety. Considering the healthy subjects experiencing AVH, the researchers are not aware whether the higher amount of women volunteering was due to a response bias or whether the percentage of women experiencing AVH without meeting the criteria for a psychiatric diagnose, is actually higher. A future study should attempt to seek out which is the case. Still, a study by Weiss et al. (2003) showed that men and women WKDW GLG QRW GLIIHU VLJQLÀFDQWOH LQ WHUPV RI WDVN performance showed a very similar pattern of brain activation. Also differences in language lateralization between men and women are absent in a study by Sommer et al. (2004).

4.1 Suggestions for future research

Some comments can be made on the applied method. The common method for determining lateralization indices is by calculating the total amount of activated voxels above a chosen threshold LQ SUHGHÀQHG UHJLRQV RI LQWHUHVW OLQ WKH OHIW YHUVXV the right hemisphere divided by the total sum of activated voxels in both hemispheres (Binder et al. 1996). Yet, this doesn't take into account the strength of activation above the threshold chosen. A different method used is to calculate a lateralization index based on the magnitude of signal change without choosing D SUHGHÀQHG DFWLYDWLRQ OHYHO In a recent review by (Jansen et al., 2006) various methods for determining lateralization indexes were compared. The main focus of this study was to identify a method that could yield robust as well as reproducible results. The authors concluded that the best method for calculating a lateralization index was to use signal intensity changes in a region of interest WKDW H[FHHGHG D SUHGHÀQHG DFWLYDWLRQ OHYHO study should make use of this method in order to achieve both robust and reliable results.

In summary, we can conclude that healthy subjects ZLWK $9+ VXJJHVW GHFUHDVHG SHUIRUPDQFH LQ language lateralization. Yet, since mean lateralization index was somewhat lower in this group compared to the healthy controls and since the sample size was rather limited, the results are likely to become VLJQLÀFDQW ZKHQ WKH VDPSOH VL]H

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