HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1° C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.

HYPNOTIC ANALGESIA: EEG CHANGES DURING COLD PRESSOR PAIN AS MODERATED BY HYPNOTIC SUSCEPTIBILITY LEVEL

Helen J. Crawford
Virginia Polytechnic Institute and State University, Blacksburg, Virginia, VA, U.S.A. 24061

This study investigated EEG pattern changes that accompany the elimination of perceived pain with hypnotically suggested analgesia to cold pressor pain. Chen et al. (1981) reported hemispheric shifts during hypnotic analgesia in dental surgery. Subjects were stringently screened low and high hypnotizables. Highs experienced no pain during analgesia dips. Monopolar recording was at F3, F4, T3, T4, P3, P4, O1, O2 with references to earlobes. Waking and hypnosis conditions were counterbalanced. EEG recordings of 32 s were done during rest, and 60 s cold pressor dips (1°C) with an without suggested analgesia. Spectral analyses between 0.7 and 42 Hz were performed.

In hypnosis, highs demonstrated significantly more high theta (5.5–7.5 Hz) integrated amplitude power in all regions than low hypnotizables. Lows showed no hemispheric asymmetries between left and right in theta, but highs did. Highs were more left hemispheric dominant during hypnosis pain dips, but in hypnotic analgesia dips they decreased in left hemispheric dominance and increased in right hemispheric dominance at frontal, temporal and parietal sites. Findings are discussed in terms of theta being associated with enhanced problem-solving activities. Supporting prior research, highs had greater hemispheric specificity than lows and also shifted to greater right hemisphere involvement during hypnosis in certain Hz bands.