Review report on a paper entitled

" Statistical Manifolds Admitting Torsion and Partially Flat Spaces "

By Masayuki Henmi and Hiroshi Matsuzoe

This paper discusses a statistical model M with a torsion, which a pre-contrast function induces on M. Authors focus on an interesting example in a binomial distribution model, which admits an existing torsion. The quasi score function is shown to induce a non-zero torsion explicitly. Alternatively, the log-likelihood function associates with the (standard) score function, which leads to a statistical manifold of torsion-free. It is excellent if authors characterize what is an essential difference between q-MLE and MLE in this model. Furthermore, it is fantastic if the discussion for this model is extended to more general situation, for example, the quasi-score function on an exponential family with missing data.

Minor comments
1. Page 7: $E_\theta\{u(x,\theta)\} \longrightarrow E_\theta\{u(X,\theta)\}$. (The same applies hereafter).
2. Page 9:
Then, the random variables X_{1n} and X_{2n} in Table 1 independently follow the binomial distributions $\longrightarrow$
Then, the random variables X_{1n} and X_{2n} in Table 1 are assumed to independently follow the binomial distributions
3. Page 10: since $X_1, ..., X_n$ are independent $\longrightarrow$ since $X_1, ..., X_N$ are independent