**Title:** Some rigidity results for Dirac-harmonic maps

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Let $(\phi, \psi)$ be a Dirac-harmonic maps from a Riemannian manifold into another Riemannian manifold. We call $(\phi, \psi)$ *trivial* if $\phi$ is harmonic. By using Bochner-type formula and extending Chen–Jost–Li–Wang' result, we give some sufficient conditions for a Dirac-harmonic map $(\phi, \psi)$ to be trivial. We also give a structure theorem of Dirac-harmonic maps from a Riemann surface generalizing result previously only known in the case when source manifold is a two sphere.

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