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**Telling mathematical stories of learning experiences - from
motivations to turning points in teachers' mathematics identity
construction**

During my PhD Pilot Study in India in January/February this year several of the teachers and lecturers I interviewed talked about their past mathematical experiences. Drake, Spillane, and Hufferd-Ackles (2001) have looked into teachers' mathematics identity as teachers and as learners of mathematics. In the present context, identity is understood as "our understanding of who we are and who we think other people are" (Danielewicz, 2001, p. 10). One aspect of understanding teacher's identity construction is through 'identity-in-discourse' (Weedon 1997). 'Identity-in-discourse' recognises that identities are represented discursively, that is, 'what the teacher tells about their understanding of who they are as mathematical learners in the past'.

Out of the nine participants, five of them had always held positive mathematical identities. The remaining four participants have compelling stories about their motivations for them to study higher mathematics. These motivations primarily came from their mathematics teachers who turned their mathematics anxiety and mathematical phobia into mathematics learning; making it enjoyable and enabling them to do mathematics. For one participant the motivation came from his family. I am interested that the *motivations* they gained from mathematics teachers or other sources acted to be *turning points* in their mathematical experiences for the rest of their lives. These were turning points in that they were transitions from a negative mathematics identity into a positive mathematics identity. These *motivations* were strong enough for them to choose mathematics for higher study and become masters in it. I conclude that mathematics identity construction is an important phase in mathematics learning, one which has the potential to impede with one's ability to do mathematics or to undertake mathematics for higher studies.

I wish to bring your attention to the motivations as told by the participants, and to highlight the potential of motivations to act as turning points in mathematics learning.

References:

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