**SUPPLEMENTAL MATERIALS**

**Supplemental questionnaire**

Mathematics motivated strategies for learning questionnaire (MSLQ) and its short version for Chinese senior secondary students

***Intrinsic goal orientation***

1. In the math class, I prefer course material that really challenges me so I can learn new thing

在学习数学时，我喜欢那些具有挑战性的学习内容，这样我可以学到新的东西。

\*16. In the math class, I prefer course material that arouses my curiosity, even if it is difficult to learn.

在学习数学时，我更喜欢学习那些能够引起我学习兴趣的内容，即使它比较难学。

\*22. The most satisfying thing for me in the math course is trying to understand the content as thoroughly as possible.

数学课最让我满意的地方是我能够尽可能透彻地理解它的内容。

\*24. When I have the opportunity in the math class, I choose course assignments that I can learn from even if they don’t guarantee a good grade.

在学习数学时，如果有选择的话，我会选择那些能让我学到更多东西的作业，即使这些作业不能保证我得到高分。

***Extrinsic goal orientation***

\*7. Getting a good grade in the math class is the most satisfying thing for me right now.

在数学课上拿到好分数是目前最令我满意的事。

\*11. The most important thing for me right now is improving my overall grade point average, so my main concern in the math class is getting a good grade.

现在对我来说最重要的事情就是成绩，所以我对数学课的主要期望是要拿个好成绩。

\*13. If I can, I want to get better grades in the math class than most of the other students.

如果可能的话，我希望我的数学能拿到比班里大部分同学更高的分数。

***Task value***

4. I think I will be able to use what I learn in the math course in other courses.

我认为我能够把在数学课上的所学应用到其它的学科之中。

\*10. It is important for me to learn the course material in the math class.

对我来说，学好数学课上老师讲授的内容非常重要。

\*17. I am very interested in the content area of the math course.

我对数学课上所学的内容很感兴趣。

23. I think the course material in the math class is useful for me to learn.

数学课上所学的东西对我来说是有用的。

26. I like the subject matter of the math course.

我喜欢数学科所学习的内容。

\*27. Understanding the subject matter of the math course is very important to me.

理解数学科的学习内容对我来说很重要。

***Control of learning beliefs***

\*2. If I study in appropriate ways, then I will be able to learn the course material in the math course.

如果我学习得法，我就能够学会数学课的内容。

\*9. It is my own fault if I don’t learn the material in the math course.

没有学好数学课是我自身的问题。

\*18. If I try hard enough, then I will understand the math course material.

如果我足够努力，我就能够理解数学课学习材料。

25. If I don’t understand the math course material, it is because I didn’t try hard enough.

如果我不能理解数学课程学习材料，那是因为我不够努力。

***Self-efficacy for learning and performance***

\*5. I believe I will receive an excellent grade in the math class.

我相信我在数学课上能够获得一个漂亮的分数。

\*15. I’m confident I can understand the most complex material presented by the instructor in the math course.

我确信自己能够理解数学课上老师所呈现的最复杂的材料。

20. I’m confident I can do an excellent job on the assignments and tests in the math course.

我敢肯定我能够出色地完成数学老师布置的作业和测试。

29.I’m certain I can master the skills being taught in the math class.

我确信自己能够掌握数学课上所教授的技能。

\*31. Considering the difficulty of the math course, the teacher, and my skills, I think I will do well in the math class.

综合考虑数学课的难度，老师和我自己的能力，我想我可以在数学课上表现得很好。

***Test anxiety***

\*8. When I take a math test I think about items on other parts of the test I can’t answer.

数学考试时，我一直想着自己不会回答的题目。

\*14. When I take math tests I think if the consequences of failing.

数学考试时，我会去想挂科的后果。

\*19. I have an uneasy, upset feeling when I take a math exam.

数学考试时，我会感到紧张不安。

28. I feel my heart beating fast when I take a math exam.

数学考试时，我会感到自己心跳加速。

***Rehearsal***

\*39. When I study for the math class, I practice saying the material to myself over and over.

学习数学时，我会一遍又一遍地通过复述进行练习。

\*46. When studying for the math class, I read my class notes and the course readings over and over again.学习数学时，我一遍又一遍地阅读课堂笔记和课程材料。

59. I memorize key words to remind me of important concepts in the math class.

学习数学时，我会熟记关键词以帮助我记住数学中的重要概念。

\*72. I make lists of important terms for the math course and memorize the lists.

我会罗列并背诵数学课中的重要术语。

***Elaboration***

\*62. I try to relate ideas in the math subject to those in other courses whenever possible.

我尽可能尝试把数学课的内容与其它课程内容关联起来。

64. When reading for the math class, I try to relate the material to what I already know.

学习数学时，我努力把正在学习的内容与自己已有的知识结合起来。

67. When I study for the math course, I write brief summaries of the main ideas from the readings and the concepts from the lectures.

学习数学时，我会对阅读材料中的主要观点和课堂学习中的主要概念进行简短的总结。

\*69. I try to understand the material in the math class by making connections between the readings and the concepts from the lectures.

学习数学时，我通过建立阅读材料和课堂所学的概念之间的联系努力理解课程内容。

\*81. I try to apply ideas from the math course readings in other class activities such as lecture and discussion.

我试图把数学课上学到的知识应用到其它课堂活动中去，例如讨论和报告。

***Organization***

\*32. When I study the readings for the math course, I outline the material to help me organize my thoughts.

学习数学材料时，我会把这些材料列成提纲以帮助我整理思路。

\*42. When I study for the math course, I go through the readings and my class notes and try to find the most important ideas.

学习数学时，我会浏览阅读材料和课堂笔记，努力找出最重要的概念和方法。

49. I make simple charts, diagrams, or tables to help me organize math course material.

我制作简单的图表帮助自己整理课程资料。

\*63. When I study for the math course, I go over my class notes and make an outline of important concepts.

学习数学时，我会复习课堂笔记并列出重要的概念和方法。

***Critical thinking***

\*38. I often find myself questioning things I hear or read in the math course to decide if I find them convincing.

我发现自己常常对数学学习中听到或读到的内容感到怀疑，进而判定它们是否令人信服。

\*47. When a theory, interpretation, or conclusion is presented in the math class or in the math readings, I try to decide if there is good supporting evidence.

面对课堂上或阅读中出现的新理论、解释、或结论，我会试图确认是否能找到好的支持证据。

51. I treat the math course material as a starting point and try to develop my own ideas about it.

我把数学课程材料当作学习的起点，并尝试在此基础上形成自己的见解。

\*66. I try to play around with ideas of my own related to what I am learning in the math course.

学习数学时，我会反复琢磨与当前学习内容相关联的我自己的想法。

71. Whenever I read or hear an assertion or conclusion in the math class, I think about possible alternatives.

每当我在数学课上听到一个结论或断言时，我都会思考是否有其它的可能性。

***Metacognitive self-regulation***

\*41. When I become confused about something I’m reading for the math class, I go back and try to figure it out.

学习数学时，对于困惑的内容，我会回头多看几遍并努力弄明白。

\*44. If math course materials are difficult to understand, I change the way I read the material.

当数学学习内容很难理解时，我会改变自己的学习方式。

\*76. When studying for the math course I try to determine which concepts I don’t understand well.

 学习数学时，我试图确定哪些概念是我不太理解的。

79. If I get confused taking notes in math class, I make sure I sort it out afterwards.

数学课遇到不懂得问题，我一定会在课后尽力去弄明白。

***Time and study environment management***

35. I usually study in a place where I can concentrate on my math course work.

我总是在一个能让我注意力集中的地方学习。

\*43. I make good use of my study time for the math course.

我可以充分利用我的数学学习时间。

\*65. I have a regular place set aside for studying math.

我有一个固定的地方学习。

\*70. I make sure I keep up with the weekly readings and assignments for the math course.

我能确保完成每周的数学课程学习和作业。

***Peer learning***

\*34. When studying for the math course, I often try to explain the material to a classmate or a friend.

学习数学时，我常试图把学习内容解释给我的同学或朋友听。

\*45. I try to work with other students from the math class to complete the course assignments.

我试着和班上的其他同学一起合作完成数学作业。

\*50. When studying for the math course, I often set aside time to discuss the course material with a group of students from the class.

学习数学时，我经常花专门的时间跟班上的一组同学讨论学习内容。

***Help seeking***

\*68. When I can’t understand the material in the math course, I ask another student in this class for help.

遇到不能理解的数学学习内容时，我会请教班上的同学。

\*75. I try to identify students in the math class whom I can ask for help if necessary.

在需要的时候，我知道班里哪位同学可以帮到我。

***Note.*** Items marked with an asterisk represent items used as short form measures

**Reference:**

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