Teacher Leaders' Emotions Mirror Teacher Professionalism via Collegial Trust

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Abstract The current study explores teacher leaders' emotions and its relationship with teacher professionalism and collegial trust in the Chinese context. A sample of 477 teacher leaders in China responded to three measures, namely, teacher leader emotions, teacher professionalism and trust in colleagues. To analyse the data, confirmatory factor analysis and structural equation modelling were utilised. The results confirmed three hypotheses on the relationships between three constructs. Specifically, positive emotions (e.g., pride and love) from teacher leaders positively and significantly affected their trust in colleagues. Moreover, enjoyment positively affected, and fatigue and anxiety negatively affected, teacher professionalism. The structural model showed that enjoyment, anxiety, and fatigue of teacher leaders directly affected teacher professionalism but pride and love indirectly affected teacher professionalism mediated by their trust in colleagues. It is also interesting to note that pride negatively affected teacher professionalism through collegial trust. Implications and future directions are proposed in the form of theory and practice.

Keywords Teacher leader · Teacher professionalism · Trust in colleagues · Quantitative

Introduction

It is universally acknowledged that teaching and school leadership are both high-risk jobs (Chen et al. 2020a, b; Riley 2018). After being underplayed for decades, research on both teachers' and principals' emotions has blossomed recently (e.g., Chen 2020a; Crawford 2019). However, the research on teacher leader emotions is still very scarce. A teacher leader in the current study is defined as a front-line teacher who is positioned between the school leaders and teachers but may not have an official position. Teacher leaders are crucial to teaching improvement, professional learning, and school-based research (Bryant and Rao 2019). They may comprise backbone teachers, subject leaders, and members of the teaching team or teaching research group in the Chinese context (Gao and Hu 2016).

Teacher leadership has gained prominence for its potential to address increasing accountability while building sustainable learning capacity and professional growth (Crawford 2019). The multiple demands which flow almost endlessly into teacher leaders' workplaces touch every aspect of their lives, which are flooded by emotions (Chen 2019a). Moreover, as of 15 April 2020, the COVID-19 global pandemic has fundamentally disrupted schooling, affecting around 1.6 billion school-aged children in 191 countries worldwide (Lucas et al. 2020). As the first shock passes, various education systems are preparing responses to this unprecedented crisis to shift schooling into remote learning mode and/or reopen schools (The Organisation for Economic Co-operation and Development (OECD) 2020). Teaching modes, school organisation and professional lives have altered dramatically. The environmental turbulence accompanying these new circumstances pressures teacher leaders to focus not only on the wellbeing of their students and colleagues, but also to care for themselves. The work

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of teacher leaders seems to become emotionally draining as individuals and leaders. As key change agents, teacher leaders are particularly vulnerable during crises as peers and other leaders seek them out for professional direction (Lucas et al. 2020). Teacher leaders in China show no exception in these unprecedented circumstances.

Some research has investigated the impact of teacher emotions on professional learning, wellbeing, and effectiveness (Chen et al. 2020a, b; Taxer et al. 2019). Similar research on principal emotions is ongoing (e.g., Chen and Guo 2020; James et al. 2019). A meta-analysis project (Yang et al. 2019) covering 116 studies in mainland China revealed a high likelihood of Chinese teachers experiencing some negative emotions such as anxiety and frustration. Chinese principals, too, are affected by high anxiety levels, feeling frustrated, and hopeless in their work (Chen 2020b). However, few studies have examined the emotions of teacher leaders and the impacts of those emotions on their professional lives. Furthermore, it is widely recognised in the literature (e.g., Tschannen-Moran et al. 2006) that a key indicator of teacher quality is teacher professionalism, and that trust between colleagues is of importance for the professional learning of teachers and the effectiveness of their schools (Tschannen-Moran and Gareis 2017; Yin et al. 2019). Hence, to provide appropriate support for teachers to survive, recover and thrive in their profession, there is a critical need for research to reveal teacher leaders' emotional situations and the influences that impact on them. The current study aims to understand the relationships among teacher leaders' emotions, teacher professionalism and collegial trust in the Chinese context.

Literature Review

Emotions of Teacher Leaders

Emotions hover like a shadow over the lives and work of educators. However, neither teacher emotions nor principal emotions have been fully defined. To date, one scholar (Farouk 2012) has defined teacher emotion as “internalised sensations that remain inert within the confines of [teachers'] bodies but are integral to the ways in which they relate to and interact with their students, colleagues”, parents and principals (p. 491) in a particular social–historical context. It is argued that sociocultural structure, norms and forces may determine which emotions are inclined to be experienced and when, where, how, and why, and by whom they are expressed (Kemper 1993; Sutton and Harper 2009). For example, Chinese societies are characterized by a high-power distance and are regulated in the hierarchically collectivist culture to maintain social harmony and interdependence (Hofstede 2011). Teachers are expected to

forgo personal ambitions to fit in with and maintain a harmonious community (Sundararajan 2015). In this view, teacher leader emotions are considered as a combination of an individual's mental activities, capacity to understand other's emotions, capacity for emotional regulation, and the responses of these emotional activities in his/her professional and social environment.

As research on teacher leader emotions is rather scarce, the current review also borrows from the literature on principal emotions to explain the nature of teacher leader emotions. The literature shows that human beings can have multiple emotions at a particular time. Scholars put efforts on identifying salient emotions in relation to their working experiences. For example, Chen (2020a) found five salient emotions from Chinese principals including enjoyment, pride, frustration, anxiety and hopelessness. As for teacher emotions, Frenzel et al. (2016) reported enjoyment, anger and anxiety as most frequently reported emotions using a sample of German teachers. Based on a series of sequential studies in the Chinese context, the Authors developed the Teacher Leader Emotion Inventory (TLEI) including six salient emotions, namely, enjoyment, pride, love, anxiety, fatigue, and hopelessness. In addition to multiple emotions, scholars also found that human emotions are not static but dynamic (Chen 2020c; Fried et al. 2015). For example, Arar and Oplatka (2018) analysed the accounts of female principals working in Israeli schools who related the emotions they experienced during various principalship stages. The principals experienced feelings of anger, hopelessness, fear, frustration, loneliness, and stress in the initial stage but also happiness; in the establishment stage, they felt calm and assertive but also vulnerable; and in the later stage, they experienced feelings of empathy, happiness, pride, and satisfaction, but also anger, anxiety, and depression. Similarly, Mawhinney and Rinke (2018) reported the sustained negative emotions (e.g., anger, frustration, feeling sad and stress) of two teacher leaders from the United States who related feelings of guilt after they had left the teaching profession.

Teacher Professionalism

Professionalism has been discussed in the context of application to areas related to community service, expertise, professional standards, and selection, supervision and autonomy (Demirkasimoğlu 2010). Scholars define teacher professionalism (e.g., Day et al. 2007) as a teacher's attempt to review their professional knowledge, competencies, attitudes, and judgements and make improvements so that the requirements of their profession are realised, and student learning and education are taken to an improved and advanced level. The idea of teacher professionalism has developed over time. Hargreaves and

O'Connor (2018) propose that teacher professionalism refers to the ways in which teachers and other educationists make changes to their teaching methods and student learning by working collaboratively so that, as a result, teacher lives are filled with perceptions of meaning and success. The concept of teacher professionalism emphasises active care for fellow professionals and mutual collaboration to meet the everyday challenges of teaching, such as addressing varying student, professional and societal cultures (Hargreaves et al. 2014). Teacher professionalism has progressively grown to encompass pedagogical expertise, professional judgement, collegial and collaborative efforts, and responsiveness to the wider professional and school communities (Hargreaves and O'Connor 2018). Similar to the concept of emotion, teacher professionalism is interpreted and formulated differently in different contexts (Troman 1996). The concept of professionalism can be used to empower or exploit teachers deriving from ideological concerns in the particular context. The policy discourse has placed teacher professionalism under the overall framework of national development (Li et al. 2019). Driven by aims for quality education in a high-stakes context, teacher professionalism in China is considered as an attempt to uphold moral-oriented attitudes, a conformity to professional standards, and a dedication to work and collaboration (Wang et al. 2014).

Scholars have identified dimensions of teacher professionalism. For example, Evans (2011) classified teacher professionalism (2011) into three dimensions: behavioural, attitudinal, and intellectual. The behavioural dimension alludes to the competences and skills teachers are required to have to fulfil their teaching. The attitudinal dimension concerns teaching improvement and the beliefs and attitudes teachers require. The intellectual dimension addresses the professional knowledge, skills, and ideas of teachers that are accumulated to improve teaching (Cansoy and Parlar 2018). Recently, the OECD (2016) defined teacher professionalism by three dimensions: professional knowledge, autonomy, and peer cooperation. The concept of professional knowledge concerns obtaining professional competences for the teaching profession. The concept of autonomy covers engagement in the decision-making and coordination processes, and for individuals to be heard in different situations of school practices. Peer cooperation alludes to teachers working collaboratively with their colleagues in professional activities. Examples include being a role model, conducting peer observations, giving peer feedback, and leading other teachers to meet the requirements of schools and stakeholders. We note that while it is possible for teachers to be highly professional without taking on responsibility as formal teacher leaders, peer cooperation encourages teacher leadership.

Trust in Colleagues

In high-functioning schools, trust has been acknowledged to an increasing extent as vital because of the contributions it makes to strengthening professional collaborative work and student learning (Tschannen-Moran and Gareis 2017). As schools move toward greater alignment with reform initiatives on accountability and professionalism, trust in colleagues is becoming increasingly essential to fulfil schools' missions (Fullan and Hargreaves 2016). After synthesizing various definitions of trust from different theoretical perspectives, Tschannen-Moran and Hoy (2000) provide a widely adopted definition of trust in the education setting as "one party's willingness to be vulnerable to another party based on the confidence that the other party is benevolent, honest, open, reliable, and competent" (p. 556).

The essence of trust is multidimensional. Berkovich's (2018) review of the organisational literature on trust summarised two broad dimensions of teachers' trust in their principals. The cognitive dimension represents beliefs regarding individual's reliability and dependability. The affective dimension, refers to the feelings of concern and care that occur between different parties (McAllister 1995). Likewise, from the task-oriented and relationship-oriented perspectives of professional roles in school, Tschannen-Moran and Gareis (2017) classified trust into five facets, namely, benevolence, honesty, openness, reliability, and competence. This classification of trust highly aligns with the definition of trust from Tschannen-Moran's team. As Tschannen-Moran (2014) argued, trust is "a normative property that results from multiple social exchanges" among different parties (p. 57). This classification is grounded on the concept of making explicit the relational nature of trust. Indeed, social exchanges in school are reliant on a set of role relationships, in which "each party holds an understanding of their role obligation and has expectations about the role obligation of the other" (Bryk and Schneider 2002, p. 20). Likewise, trust is context-dependent. Teacher trust in colleagues is considered as an important indicator of the quality of interpersonal relationship (similar to the Chinese concept of *guanxi*) (Yin et al. 2019). This trusting relationship is a crucial cornerstone rapport between colleagues particularly with regard to collaborative and professional learning in the China context (Zheng et al. 2016). Teachers in China, therefore, tend to build trusting bonds with their colleagues in their schools to facilitate various kinds of collaborations. It seems that Chinese teachers focus more on relational trust which serve as a prerequisite for establishing task-oriented trust (Yin et al. 2019).

Emotions, Trust in Colleagues, and Teacher Professionalism

Despite there being no empirical evidence to identify direct relationships between teacher leader emotions, collegial trust, and teacher professionalism, three theoretical models may anchor linkages between these three constructs. First, a teacher emotion model highlights the effects of teacher emotions on student and teachers (Chen 2020a; Frenzel 2014). This model may support the connection between teacher leader emotions and their professional behaviours, here called teacher professionalism. Second, Leithwood et al. (2020) revisited a four-path framework (rational, emotional, organizational and family) for the influence of school leadership on student learning and pointed out that school leaders can create a malleable “emotional path” out of four paths on student learning by shaping the nature of school work including teacher trust in colleagues (p. 11). Teacher leader emotions may influence “the emotional path” of teacher trust in colleagues because evidence suggests that teacher leaders’ efficacy is predicated on trusting interactions and mutual respect (Pinda-Baez et al. 2020). Third, a job demands–resources (JD–R) model provides a theoretical framework (Bakker and Demerouti 2007) for the assumption that trust in colleagues, as a job resource, can encourage teachers to engage in school affairs as part of teacher professionalism.

In addition to providing a theoretical base, the literature on teacher and principal emotions can provide empirical indications for establishing linkages between the three constructs. Although no research has investigated the direct effect of educators’ emotions on teacher trust in colleagues, one Israeli principal in Arar and Oplatka’s (2018) study reported conveying their pleasant emotions to create an optimistic school culture. However, this emotional transit only happened after trust was established between the principal and teachers. Furthermore, Wu and Chen (2018) found that teacher emotions affect collegial relationships. Specifically, in Hong Kong teachers with more positive emotions are more likely to be proactive and build a trusting relationship with their colleagues. In a sample of schools in The Netherlands, Moolenaar and Sleegers (2010) used social network analysis to find a relationship between teacher trust in their colleagues and density of their work-related communications. Trust has often been portrayed as the “glue” that binds things together and a ‘lubricant’ reducing friction as well as facilitating smooth operations among different parts (Tschannen-Moran 2014; Yin et al. 2019), so it is inferred that teacher leader emotions have an impact on collegial trust.

Hypothesis 1 (H1) Teacher leader emotions affect collegial trust.

H1a Teacher leaders’ positive emotions positively affect collegial trust.

H1b Teacher leaders’ negative emotions negatively affect collegial trust.

The effect of emotions of educators on teacher professionalism has not previously been investigated (Chen 2019b). It has been reported that school principals are able to use their emotional intelligence skills to achieve teacher collaboration and commitment so that mandated curriculum changes could be implemented (Grobler et al. 2017). Moreover, the pleasant emotions of principals have a positive impact on personal engagement with their staff (Crawford 2019) and professional performance of their staff (Arar and Oplatka 2018). Furthermore, literature on teacher emotions has identified a reciprocal relationship between emotions and work engagement in Croatia (Burić 2019). The focus of teacher professionalism is that to fulfil the tasks and challenges that exist within the teaching profession, teachers need to actively care for and collaborate with their colleagues (Hargreaves and O’Conno 2018); this leads to the deduction that teacher leader emotions affect teacher professionalism.

Hypothesis 2 (H2) Teacher leader emotions affect teacher professionalism.

H2a Teacher leaders’ positive emotions positively affect teacher professionalism.

H2b Teacher leaders’ negative emotions negatively affect teacher professionalism.

Comparatively, there are more investigations on the effect of trust on teacher professional learning. Tschannen-Moran et al. (2006) investigated a series of school climate variables that included teacher professionalism, which is related to the quality of teacher-teacher relationships and trust. In Hong Kong, Lee et al. (2011) found that trust in colleagues correlated significantly to their feelings towards a professional learning context. In addition, schools with greater teacher professionalism also tended to have greater teacher trust in their principal and school leaders had stronger professional orientations. Tschannen-Moran (2009) also reported that teachers’ higher levels of trust in their colleagues correlated positively with teacher collaboration, considered vital for teacher professionalism. In the Chinese context, empirical evidence recorded that teacher trust in colleagues positively mediated the effect of principal leadership on teacher professional learning (Zheng et al. 2016). Therefore, the linkage between teacher trust in colleagues and teacher professionalism seems valid. Taken together, the third hypothesis has been proposed (Fig. 1).

The Hypothesized Model

Fig. 1 The hypothesized model

Hypothesis 3 (H3) Teacher leader emotions affect teacher professionalism mediated by collegial trust.

Method

Participants

An on-line survey was administered to 763 teacher leaders in three teacher leader training programmes from three provinces in China. All participants were well informed about the purposes and procedure of the project, their voluntary participation, and the confidentiality of the data before filling in the questionnaire. A total of 477 valid surveys were received with a good response rate of 62.5%. The sample contained 460 females (96.4%) and 17 males (3.6%). 431 participants (90.4%) were from kindergartens; 40 (8.4%) were from primary schools; and 24 (5.0%) were from secondary schools. The majority of respondents (85.3%) had 1–11 years of teaching experience, followed by 8.0% with more than 20 years, and 6.7% with 11–20 years of teaching experience. About 125 (26.2%) participants had an average of 12.8 years of experience as a teacher leader. Most of them (67.2%) held an undergraduate degree and 7 (5.6%) held a master degree.

Measures

The Teacher Leader Emotion Inventory (TLEI)

The 24-item TLEI developed by the authors encompassed six dimensions consisting of three positive (enjoyment, pride, and love) and three negative emotions (anxiety, fatigue, and hopelessness). The TLEI measures a variety of theoretically relevant and empirically grounded salient emotions of teacher leaders in relation to their working experiences, such as professional capacity, job nature, classroom level, school level, and between schools

(Table 1). A 6-point agreement rating scale was used excluding a neutral point (e.g., 1 = strongly disagree to 6 = strongly agree). The TLEI was developed in the Chinese context with high reliability ($\alpha = 0.84$).

Teacher Trust in Colleagues Scale (TTCS)

The 8-item TTCS was extracted from the Faulty Trust Scale developed by Hoy and Tschannen-Moran (2003). The TTCS contained five facets mentioned in the definition, namely, benevolence, honesty, openness, reliability, and competence. As with the TLEI, a 6-point agreement rating scale was utilized. The TTCS has been adopted widely in different contexts with a stable high reliability (e.g., $\alpha = 0.87$, Schannen-Moran 2014).

Teacher Professionalism Scale (TPS)

The 8-item TPS was developed by Tschannen-Moran et al. (2006) by referring to the existing Organizational Health Inventory (Hoy and Feldman 1987) and Organizational Climate Descriptive Questionnaire (Hoy and Sabo 1998). This widely adopted instrument covers four domains namely professional knowledge, attitudes, autonomy, and peer collaboration. The TP has also been adopted in different contexts with a stable high reliability (e.g., $\alpha = 0.88$, Cansoy and Parlar 2018).

Analyses

There were four steps involved in the data analysis procedure. First, missing data were calculated with the expectation maximisation algorithm performed in SPSS 26. Reliability analysis was used to calculate the Cronbach's coefficient of each variable. Second, the descriptive statistics including mean (M) and standard deviation (SD) were also obtained in SPSS. Third, three measurement models were trimmed using confirmatory factor analysis (CFA) performed by AMOS 26 with maximum likelihood estimation to respond to Hypotheses 1 and 2. Fourth, structural equation modelling (SEM) was then used to test Hypothesis 3 on the hypothesised relationships between the three constructs.

Results

The Measurement Model: Teacher Leader Emotion Inventory

The Teacher Leader Emotion Inventory (TLEI) with 24 items consists of six inter-correlated factors (i.e., enjoyment, pride, love, anxiety, fatigue and hopelessness) via a

Table 1 TLEI, TTCS and TPS items and factor loadings

Scale and items	Factor loading
Teacher leader emotion	
Enjoyment	
I am happy of being a teacher leader since it promotes my professional growth	0.71
I am happy to support my colleagues to improve teaching	0.82
I am happy to arrange professional development programmes	0.82
I am happy to involve with school decision-making	0.79
Pride	
I am proud that I am capable of doing my job as a teacher leader	0.75
I feel like a winner when my team colleagues succeed	0.77
I am proud when my colleagues collaborate for a common goal	0.81
I am proud of sharing my school experience with other peer schools	0.81
Love	
I care about my students	0.65
I feel warmth when I think about my colleagues	0.78
I feel warmth when my supervisors trust me	0.74
The work of being a teacher leader evoke feeling of love inside me	0.74
Anxiety	
I feel anxious when I am self-doubt	0.78
I am worried if I am not recognized	0.82
I am worried when my colleagues do not use classroom data to improve their teaching	0.59
I am worried whether my plans aisle with the goals of school	0.59
Fatigue	
I feel exhausted at the end of working day	0.68
I feel tired when dealing with unmotivated colleagues	0.67
I feel tired when dealing the conflicts between my supervisors and colleagues	0.82
I feel exhausted since I do not have sufficient professional training of as a teacher leader	0.79
Hopelessness	
I feel I cannot do anything more when I am not sufficiently empowered	0.78
I feel I cannot do anything more with insufficient resource	0.84
I feel I cannot do anything more when school climate is resistant to change	0.86
I feel I cannot do anything more with the hierarchical school structure	0.81
Teacher trust in colleagues	
Teachers in this school typically look out for each other	0.86
Teachers in this school trust each other	0.90
Even in difficult situations, teachers in this school can depend on each other	0.92
Teachers in this school have faith in integrity of their colleagues	0.89
Teachers in this school are suspicious of each other	0.50
When teachers in this school tell you something, you can believe it	0.66
Teacher professionalism	
The interactions between faculty members are cooperative	0.72
Teachers respect the professional competence of their colleagues	0.81
Teachers in this school exercise professional judgment	0.80
Teachers are committed to helping students	0.75
Teachers accomplish their jobs with enthusiasm	0.83
Teachers provide strong social support for colleagues	0.82

6-point scale. CFA was also performed to further determine the structure of the model. The original 6-factor TLEI model was identified with a sufficient model fit

($\chi^2 = 832.282$; $df = 237$; $\chi^2/df = 3.512$; $p = 0.000$; TLI = 0.90; CFI = 0.914; SRMR = 0.0743, and RMSEA = 0.073 (see the left hand in Fig. 2; Table 2). Each of these 6

Fig. 2 The structural model of teacher leader emotions, trust in colleagues, and teacher professionalism. Inter correlations and error terms were removed for simplicity

subscales is composed of 4 items, and the factor loadings of all the items were greater than 0.59 (Table 2). The enjoyment factor is mainly reflected in self-professional growth, providing professional support for colleagues, organising development projects and participating in school decision-making. The pride factor consists of the affirmation of self-capability as a teacher leader, the successful interaction with colleagues, the establishment of common goals and school experience sharing. The love factors refer to the warmth that teacher leaders generate in their relationship with students, colleagues and supervisors. Also, it includes the work of being a teacher leader evoking the feeling of love. The anxiety factor is divided into self-doubt, denial, work mismatch and plan conflict. fatigue mainly manifests in the workload, the colleague's disposition, interpersonal conflict, and lack of the professional training. The hopelessness factors focused on empowerment, resources, school atmosphere as well as structure.

Using descriptive data from SPSS, it was revealed that love ranked as the most frequent emotion ($M = 5.35$, $SD = 0.68$), while the negative emotions hopelessness and fatigue were the least frequent ($M = 4.29$ for both, $SD = 1.13$ and $SD = 1.04$, respectively). Similarly, the scale correlations varied from small (-0.13) to large (0.80) while pride was highly related to love ($r = 0.80^{**}$, $p < 0.01$). The three positive emotions were highly related

Table 2 TLEI, TTCS and TPS means, SDs, and Cronbach α

	M	SD	Cronbach α
Teacher leader emotion			0.88
Love	5.25	0.68	0.81
Pride	5.18	0.69	0.85
Enjoyment	5.02	0.77	0.86
Anxiety	4.81	0.77	0.79
Hopelessness	4.29	1.13	0.89
Fatigue	4.29	1.04	0.83
Teacher trust in colleagues	4.59	0.90	0.90
Teacher professionalism	4.20	0.73	0.91

to each other, varying from 0.73 to 0.80, and fatigue was highly related to hopelessness ($r = 0.75^{**}$, $p < 0.01$) in the negative emotions. According to the criterion (Cronbach's $\alpha \geq 0.55$) recommended by O'Rourke and Hatcher (2013), the alpha values for the six dimensions ranged from 0.79 to 0.89 (Tables 2 and 3) and the factor reliability was 0.88, which indicated a satisfactory level of internal consistency.

The Measurement Model: Trust in Colleagues Scale

After deleting two items, the 6-item model of TTCS which was rated on a 6-point scale established a good model fit,

Table 3 TLEI, TTCS and TPS intercorrelations and correlations

Scale	Teacher emotion						Trust	Professionalism
	Enjoyment	pride	Love	Anxiety	Fatigue	Hopelessness		
Teacher leader emotion								
Enjoy	–							
Pride	0.78**	–						
Love	0.73**	0.80**	–					
Anxiety	0.30**	0.39**	0.36**	–				
Fatigue	– 0.07	0.03	– 0.04	0.48**	–			
Hopeless	– 0.13**	– 0.00	– 0.10*	0.37**	0.75**	–		
Teacher trust in colleagues	0.53**	0.57**	0.63**	0.24**	– 0.17**	– 0.23**	–	
Teacher professionalism	0.45**	0.43**	0.49**	0.19**	– 0.22**	– 0.24**	0.63**	–

*Correlation is significant at the 0.05 level (2-tailed), **Correlation is significant at the 0.01 level (2-tailed)

that is $\chi^2 = 25.427$; $df = 9$; $\chi^2/df = 2.825$, $p = 0.003$, TLI = 0.987, CFI = 0.992; SRMR = 0.0155, RMSEA = 0.062 (Fig. 2). These six items were used to assess faulty trust in colleagues after modifying the model. Five items were used to measure participants' opinion about whether teachers look out for, depend on, trust each other and have faith in the integrity of their colleagues and believe what colleagues say. According to the analysis of correlations, the TTCS were significantly negatively related to fatigue and hopelessness ($r = -0.17$ and -0.23) and varied from moderate ($r = 0.24$) to strong ($r = 0.63$) to other dimensions of emotions. The Cronbach's α for the interconnectivity of trust showed a high reliability of 0.90 (Tables 2 and 3).

The Measurement Model: Teacher Professionalism Scale

Similar to the TTCS, the construct of TPS deleted two items and finally included 6 items that were examined through a 5-point scale so that they received an adequate model fit during the confirmative factor analysis ($\chi^2 = 106.849$; $df = 9$; $\chi^2/df = 11.872$ $p = 0.000$, TLI = 0.907, CFI = 0.944; SRMR = 0.0398, RMSEA = 0.151) (Fig. 1). These items mainly focused on cooperative interaction, respect for competence, professional judgment, enthusiasm for work, willingness to help students and providing social support to faculty members. The factor loadings of these six items (displayed in Table 1) varied from 0.72 to 0.83. Descriptive data indicated the scale correlation to other factors ranged from -0.24 to large. Correlation result showed a positive relationship to TLEI except to fatigue and hopelessness, and was also significantly positively related to TTCS ($r = 0.63^{**}$, $p < 0.01$). Besides, TTCS revealed the high factor reliability of 0.91 (Tables 2 and 3).

The Structural Model: Teacher Leader Emotion, Trust in Colleagues, and Teacher Professionalism

On the basis of the three assumptions, a structural equation model in which all paths from TLEI to TTCS, TPS, and TTCS to TPS were tested using standardised estimates. After removing statistically non-significant paths, the revised model indices showed an acceptable model fit to the data, $\chi^2 = 1543.534$; $df = 573$; $\chi^2/df = 2.694$; CFI = 0.914; TLI = 0.905; RMSEA = 0.06; and, SRMR = 0.0698 (Fig. 2). Generally, this model demonstrated that the TTCS were more affected by positive emotions while TPS were more affected by negative emotions. One more interesting finding was that hopelessness was neither related to professionalism nor trust. Moreover, the positive emotions had high correlations with TTCS with an average r of 0.58. The negative emotions included fatigue and hopelessness, and had a moderate negative correlation with TPS with an average r as -0.23 .

The structural model identified six regression paths leading from the TLEI to TTCS and TPS. The beta value of all paths ranged from $|-0.63|$ to $|1.33|$ with an average value of 0.21. TTCS had two predictors consisting of two positive emotions (pride and love). TPS had four predictors which included enjoyment, anxiety, fatigue and TTCS. The result indicates that teacher leader emotion predicts teacher professionalism moderated by trust in colleagues. First, the scale of enjoyment and anxiety in teacher emotion had a significant explanatory power and was positively related to teacher professionalism ($\beta = 0.13$, $p < 0.05$; $\beta = 0.13$, $p < 0.05$), while fatigue was negatively related to teacher professionalism ($\beta = -0.25$, $p < 0.001$). Second, although there was no statistically significant relationship between pride and love with professionalism, they were both significantly related to trust. Pride was negatively related to trust ($\beta = -0.63$, $p < 0.05$), while love

demonstrated being positively significant with trust ($\beta = 0.89$, $p < 0.001$). Trust was highly significant and positively related to professionalism ($\beta = 0.527$, $p < 0.001$), which meant that pride and love indirectly affected teacher professionalism. It was revealed that the effect of love on professionalism needed to occur through Trust. Therefore, a model of TTCS acting as a mediator between TLEI and TPS is believed to exist.

Discussion and Future Directions

The current study identified the relationships between teacher leader emotions, teacher professionalism and teacher trust in colleagues using a sample of teacher leaders from China. This section outlines the major findings on teacher leader emotions that emerged from the TLEI measurement model and how they relate to the other two constructs from the structural model based on the three hypotheses.

The TLEI measurement model in the current study encompassed a variety of theoretically relevant and empirically demonstrated salient emotions of teacher leaders in relation to their working experiences at the classroom level, school level, and between schools such as professional capacity, role nature, and school climate. The results for the TLEI showed that teacher leaders were more likely to give a higher rating to positive emotions such as love ($M = 5.25$ out of 6) followed by pride ($M = 5.18$) and enjoyment ($M = 5.02$) and gave the lower rating to negative emotions such as fatigue and hopelessness ($M = 4.29$) followed by Anxiety ($M = 4.81$). Teacher leaders in this study seemed positive regarding the nature of role responsibilities and their professional competence of being a teacher leader, having a sense of accomplishment, and involvement in the decision-making process. However, these teacher leaders were inclined to suffer from lack of empowerment and recognition, a resistant climate, insufficient resources, unmotivated colleagues, distrust from the principals, and self-doubt.

These results echo other studies on teacher emotions in Germany in which teachers rated enjoyment higher than anger and anxiety (Frenzel et al. 2016) and in Croatia in which (Burić 2019) teachers appraised joy, pride, love higher than fatigue, hopelessness, and anger. Similar patterns ranked by teachers from China were obtained regarding positive and negative emotions (Chen 2016). However, the discrepancy of this study from other aforementioned studies is that, although the ratings for negative emotions (e.g., the highest rating 4.81 out of 6) are similar to those from Chinese teachers (4.63 out of 6 from Chen 2019c), they are far lower than from principals from China (3.78 out of 6 from Chen 2020b) and from teachers from

Croatia (2.83 out of 5 from Buric et al. 2018) and Germany (1.88 out of 5 from Frenzel et al. 2016). These gaps indicate that teacher leaders in this study reported a higher level of negative emotions compared to their teacher colleagues and supervisors both from the same context and different contexts. It is expected that future studies could focus more on understanding a fuller picture of the emotional situation of teacher leaders because of their crucial bridging role in school operations.

Having established the models of measurement, we further tested the three hypotheses that determine the relationships between teacher leader emotions, teacher trust in colleagues, and teacher professionalism in the structural model. In general, teacher leader emotions significantly affected teacher professionalism through teacher trust in colleagues. H1 which predicted a relationship between teacher leader emotions and teacher trust in colleagues was found. Specifically, optimistic emotions (e.g., pride and love) from teacher leaders positively and significantly affected teacher trust in colleagues. This result aligns with the studies (Arar and Oplatka 2018; Chen and Walker 2021) that reported that principals from Israel conveyed their pleasant emotions to create an optimistic school culture. However, teacher trust in principals is the prerequisite to ensuring this transit. As Borko (2004) argued, leaders must “help teachers to establish trust, develop communication norms that enable critical dialogue, and maintain a balance between respecting individual community members and critically analysing issues in their teaching” (p. 6, cited in Zheng et al. 2019). Thereafter, Louis claimed that “trust must come first” (2006, p. 483). Considering the scarcity of empirical evidence detailing the role of teacher leader emotions on school trust, particularly teacher trust in colleagues, this study offers empirical evidence to cast a light on the role of teacher leader emotions, especially positive emotions on collegial trust. Future studies may investigate the reasons for these links and explore the relationship between negative emotions of teacher leaders and collegial trust.

Unsurprisingly, H2 which posited a link between teacher leader emotions and teacher professionalism was also verified. Teacher leader emotions significantly influenced teacher professionalism. In particular, enjoyment positively, and fatigue and anxiety negatively, affected teacher professionalism. As the central essence of teacher professionalism is collaboration (Hargreaves and O’Conno 2018), the associations between positive emotions and teacher professionalism identified in the current study resonated with the result from Burić (2019) indicating a reciprocal relationship between teacher emotions and work engagement in Croatia. However, no research has directly investigated the impact of teacher leader emotion on

teacher professionalism, so it is recommended that future research focus on this field especially.

As expected, H3 which postulated that the effect of teacher leader emotions on teacher professionalism was mediated by trust in colleagues was also confirmed. The structural model showed that enjoyment, anxiety, and fatigue of teacher leaders directly affected teacher professionalism but pride and love only indirectly affected teacher professionalism mediated by teacher trust in colleagues. It is important to note that teacher leaders need to be cautious about boosting teacher professionalism through building the prerequisite of teacher trust in colleagues. As front-line change agents and the 'glue' between teachers and school principals, teacher leaders need to cope with increasing accountability while they are building learning capacity (Campbell et al. 2018). When there is a low level of trust between teachers, significant barriers will be exhibited showing how these new models of professionalism and collaboration are established. Teacher trust in their colleagues influenced trust that went beyond teacher professionalism (Schannen-Moran 2014). It should be also noted that the findings from the current study did identify structural links between three constructs. Chinese teachers have the ability to work collaboratively because of the notion of collectivism in Chinese culture, thus enabling teacher professionalism. However, teachers who simply conform with the administrative requirements of their school for professional learning may merely produce superficial collaboration. In the long term, in Chinese school contexts, mandating institutional structures that support collective teacher learning may not give rise to artificially contrived collegiality but, instead, result in collegiality which is deliberately arranged and which produces genuine teacher learning and collaborations with peers. We should be mindful, therefore, to deal with collegial trust before progressing further (Wang 2015, Zhang et al. 2016). This study also provides implications for future research seeking explanations for these encouraging structural relations.

Two interesting findings were revealed in the current study. One, that pride negatively affects teacher professionalism through teacher trust. It was expected that a positive linkage may be identified. It has been reported by Hofstede et al. (2010) that there is an assumption in Chinese culture that pride is a sensitive emotion which seemingly symbolises high-power distance, high collectivism, and high Confucian dynamics. If an individual has feelings of pride in their employment and decides to tell their colleagues, they may, as a result, consider him/her to be individualised and not modest. Such feelings, therefore, can have a detrimental effect on building and maintaining harmonious and peaceful relationships and rapport between colleagues particularly with regard to collaborative and

professional learning in the China context (Zheng et al. 2016). Zhang and Pang (2016) reported that Chinese teachers are able to easily collaborate with each other due to the collectivism in China and, therefore, promote professional learning. However, it has been shown that only when positive relationships are immersed with sufficient collegial respect and trust, can Chinese teachers have the ability to bring about genuine peer collaborations and teacher learning (Yin et al. 2019). This negative connection that exists, therefore, between pride and teacher professionalism seems to be logical in China. The other interesting finding is that there were no links for hopelessness. Although we made many attempts to find a linkage between hopelessness and other dimensions in the structural model, we could not identify one. Looking closely, the correlation values between hopelessness, teacher trust and teacher professionalism were very small; this might be one of the explanations for this interesting finding. We should also note that although a significant link was not identified, hopelessness might contribute to the current structural model in this study as the six dimensions of emotion are interrelated in one CFA model. However, together with the first finding, future studies could especially investigate this link.

Nevertheless, the study will contribute to the advancement of knowledge production of teacher leader emotions and the relationships with teacher processualism via with teacher trust. It represents a first attempt to understand teacher leader emotions in a multiple-dimension survey. Accordingly, this study is particularly critical and timely to contribute to constructing the knowledge base on teacher leader emotions and promoting professional learning as a bridging role of a teacher leader during turbulent circumstances. Preparing teacher leaders for juggling these mixed patterns of teacher emotions, collegial trust, and teacher professionalism is not easy. To support our teacher leaders' resilience in performing their bridging role at school, teacher educators, educational researchers, and policymakers need to cooperate with each other by involving these aspects in training programmes as well as providing a supportive school atmosphere.

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