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Self-determination theory as a framework for understanding needs of youth at-risk: Perspectives of social service professionals and the youth themselves

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Citation

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Abstract

While there is evidence from the self-determination perspective for the positive impact of self-determination interventions on at-risk youth's transition outcomes, no research to date, has attempted to understand youth needs from both social service provider and youth client perspectives in the same study. The present study sought to generate a nuanced understanding of youth needs. For this purpose, the study was conducted in two phases. In phase 1, twenty-one social service professionals (case workers, social workers, counsellors, program supervisors) were interviewed to get an understanding of their perception of youth needs and how they are being met. In phase 2, 45 at-risk youths aged between 15 and 25 were interviewed to get an understanding of their perception of their most essential needs and how they are being served or under-served. Participants also completed a short survey on needs satisfaction, life satisfaction and resilience outcomes. Results revealed misalignment between the social service programmes and youths' articulated needs. The findings point towards the importance of considering the specific role of the psychological need for autonomy and relatedness in bridging the gap between service provision and client expectations. Recommendations for intervention researchers and practitioners are proposed.

1. Introduction

Youth at-risk is a blanket term typically used to describe young people (between 12 and 21 years of age) with personal problems or adverse structural or cultural circumstances (Riele, 2006). In everyday usage, at-risk youth are those who may be seriously anti-social, may have dropped out of school, may be homeless, taken to substance abuse and/or engaged in illegal activities. However, such a conceptualisation misses the prevalence of those factors that place these young people at risk in the first place, such as poverty, family dysfunction and disturbed neighbourhoods Resnick and Burt (1996) made explicit reference to the negative antecedent conditions mentioned above. They state that vulnerable neighbourhoods are those where crime may be rampant, with inadequate housing and/or negative peer and adult role models. Similarly, family issues such as lack of parent involvement/support, dysfunctional communication patterns are seen as risk markers for adolescent problems. Finally, poverty in the form of actual (living in poor families) or perceived material deprivation has been associated with youth problems such as early sexual activity and teenage pregnancy. Further, they identify risk 'markers' or red flags such as poor school performance or out of home placements in foster homes as behavioural indicators of future problems. The current study focuses on the latter, broader conceptualisation and defines youth at-risk as youth aged between 12 and 25 years old possessing risk factors including conduct issues, family relationship issues, anti-social attitudes, criminal conduct and incarceration of parent(s)/caregiver (MSF, 2018). This definition encapsulates youth who, (1) have had behavioural or social misconduct, and (2) who are at risk due to structural or familial factors such as poverty, family issues and vulnerable neighbourhoods.

There is a substantial cluster of educational research that applies self-determination principles in educational programs catering to youth with disabilities (Ackerman, 2006; Carter, Lane, Pierson, & Glaeser, 2006; Solberg, Howard, Gresham, & Carter, 2012; Wehmeyer & Palmer, 2003). Within this paradigm, self-determined people are 'causal agents' in their lives.They make things happen and are actors in their lives rather than being acted upon (Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000). In summary, these studies highlight the positive impact of self-determination on future employment, independent living and quality of life of these youths. Self-determination has also been regarded as a potential action lever in positive youth development (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004). However, very few studies have documented the effects of self-determination among other vulnerable youths. For instance, Washington, Hughes, and Cosgriff (2011) found that high poverty Black youth had very limited opportunities to exercise self-determination and advocated for the inclusion of self-determination instruction for all youth-especially those who are from at-risk environments.

This study uses self-determination theory (SDT) offered by Deci and Ryan (1995) as a lens to better understand the needs of youth-at-risk and their fulfilment from the vantage points of both social service provider's and youth client's perspectives. It examines the various programmes for youth-at-risk aged 12 to 25 years with respect to the extent to which they aid in the fulfilment of youth needs. This perspective on self-determination is aligned with the conceptualisation of educational researchers mentioned above whereby personal agency (autonomy) is viewed as an essential psychological need in addition to the need for competence and relatedness. Next, we discuss the self-determination theory perspective that forms that theoretical foundation for the current study.

1.1. Self determination theory

Self-determination theory (SDT) is a human agentic theory that postulates that people are motivated to fulfil three basic psychological needs in conjunction to physical needs. This tendency towards

psychological growth is seen in all individuals irrespective of their gender, age, socio-economic status or ethnicity. However, contextual factors are important as the environment/context is seen as either supportive of needs fulfilment or a challenge to satisfaction of needs (Deci & Ryan, 2002). Thus, the theory pays special attention to the person-environment fit. While lay knowledge informs us that putatively, biological needs comprise food, water and shelter, there is little clarity among laypersons about what constitutes an individual's basic psychological needs. SDT theorists propose that the need for autonomy, the need for competence and the need for relatedness are the essential nutriments for psychological well-being. The need for autonomy is the need to feel volitional and have a sense that one can exercise free will and that any activity or pursuit in life is freely chosen rather than imposed. The need for competence is the need for effactance (to be effective), the need to feel that one can make impact on the environment around and gain some valued outcomes within it (Deci & Ryan, 2000). This state of being effective can be achieved in varied domains of an individual's life such as academics, sports, work, skills or talents. Finally, the need for relatedness is the need to feel a sense of belonging, simply to be loved and cared for (Van den Broeck, Vansteenkiste, De Witte, Soenens, & Lens, 2010). There is a plethora of empirical evidence to support the salutary effects of psychological needs satisfaction on mental health and well-being (Martela & Ryan, 2016; Milyavskaya, Philippe, & Koestner, 2013; Raj & Chettiar, 2012). Recently, evidence has been generated to support the positive association of psychological need satisfaction with physical health outcomes too (González, Swanson, Lynch, & Williams, 2016). This implies that when psychological needs are being better met, there are better physical health outcomes. Further, self-determination has been regarded as one of the defining characteristics of resilience (Earvolino-Ramirez, 2007) which means that underserved groups (groups inadequately provided for by society's services and facilities) who are self-determined may be much more resilient in the face of unmet social needs as compared to those who lack such self-determination. There is a line of research that has linked needs fulfilment to resilience (Harvey & Delfabbro, 2004; Wong, 2008). As resilience is the ability of an individual to bounce back from adversities, it should act as a countermeasure to risk factors that youth-at-risk routinely face. For example, youths who are able to resolve peer stress and regulate their emotional and behavioural responses are considered more resilient compared to those who are unable to do so (Monti & Rudolph, 2017). Promotion of resilience has been associated with increasing odds that more youth from at-risk environments will succeed (Washington et al., 2011). Clearly, these positive outcomes of well-being and resilience should be important goals for social service organisations addressing youth at-risk needs and thus are variables of interest in the current study too. Therefore, self-determination that is fuelled by basic needs satisfaction opens up a range of possibilities in promoting the empowerment and transformation of underserved groups such as youth at-risk. However, cultural and contextual forces are seen as critical in the fulfilment of both biological and psychological needs. For example, a drought-ridden village is not a conducive environment for the fulfilment of the biological need for food and water. Similarly, the social surroundings of an individual may inhibit the satisfaction of psychological needs. Students of over-controlling teachers (who use domineering/authoritative language, inhibit student initiative and do not acknowledge student perspectives) perform worse academically and report low perceived competence (Taylor, Lekes, Gagnon, Kwan, & Koestner, 2012). In this case, the over-controlling teachers become the situational blocks or non-conducive environment for need fulfilment. Apart from their families and school environment, social service organisations attended by vulnerable youths form an influential social environment which may be need supportive or need thwarting.

Also SDT is a needs-based, human motivation framework that applies to everyone regardless of age, gender, and background. Therefore, SDT sees youth-at-risk as individuals striving for growth and fulfilment. With its explicit focus on psychological needs fulfilment, it looks beyond criminogenic needs

or risk factors, giving due attention to non-criminogenic needs and their humanitarian and motivational benefits.

A commonly used risk assessment and classification framework for youth at-risk is the Risk-Need-Responsivity (RNR) model (Bonta & Andrews, 1994; Li, Chu, Goh, Ng, & Zeng, 2015) that gives explicit attention to the concept of 'need'. It postulates that youth offenders have multiple needs which can be broadly classified into 'criminogenic' (such as need to stop taking drugs, need for parental monitoring) needs and 'non-criminogenic' (such as need for self-esteem, need for physical health) needs. While the model suggests that non-criminogenic needs are less critical for corrective rehabilitation, it also states that the humanitarian and motivational benefits of catering to non-criminogenic needs may help to alter future recidivism. The review of the existing literature later shows that, in actual practice, this vital component (giving importance to non-criminogenic needs) often receives minimal attention while the criminogenic needs continue to remain a priority area for social services to tackle. Human agentic theories such as SDT explain human needs in a comprehensive way. They take into account both biological and psychological needs as propellers of human action. They assume that both biological and psychological need fulfilment is essential for optimal functioning and well-being (Shogren, Little, & Wehmeyer, 2017). They are not seen as disparate entities in any way. This is why SDT is seen as a particularly useful framework to understand youth needs and how they may be met by social services designed to cater to at-risk youth.

Few studies have documented the impact of self-determination interventions on at-risk youth related outcomes. For instance, Powers et al. (2012) conducted a randomised controlled trial to test the efficacy of a self-determination intervention for improving transition outcomes for youth in foster care and special education. The self-determination intervention entailed applying achievement skills such as goal setting and problem solving, developing partnerships, focus on accomplishments and working towards personally valued transition goals. Enhanced transition outcomes (increased self-determination, better quality of life, high school completion, employment and independent living after foster care) resulted for youths in the intervention group. Subsequently, Geenen et al. (2013) documented the effectiveness of self-determination interventions in improving the school engagement and achievement of youths in foster care and special education. More recently, an in depth qualitative study of 10 youth who participated in the My Life self-determination intervention, the youth reported the importance of self-direction, coaching relationships and peer mentoring as essential for their future success (Powers et al., 2018). Another randomised controlled trial showed how SDT-focused mentoring had a significant effect on the mentees' overall psychological needs satisfaction (Lewis, Trief, & LaGuardia, 2016). In addition, Su and Reeve's (2011) meta-analysis of 19 training intervention studies designed to enhance autonomy revealed that they were overall effective (moderately-large effect size of 0.63) at helping the participants support the autonomy of their clients. However, research examining needs of youth at-risk from a self-determination perspective is non-existent in Singapore.

In line with SDT's focus on need for relatedness, the importance of relationships is highlighted in studies that provide evidence for the improvement in academic and socio-emotional functioning of children with behavioural and demographic risk through investment in developing close relationships with teachers (Hamre & Pianta, 2005; Hughes, 2012). Further, unsatisfied psychological needs has been associated with aggressive tendencies among late adolescents, career indecision and lack of clear purpose in life (Kuzucu & Şimşek, 2013).

Given the predictive value of needs assessment on program construction and improvement (Esters, 2003), we argue that a deeper appreciation of inner psychological needs in conjunction with the practical physical needs is needed to get a nuanced understanding of marginalised groups within a population. It is

critical to take an integrated approach in unravelling the supports required and those provided to vulnerable populations. While the extant literature documents the promise of self-determination interventions in promoting positive youth outcomes and youth needs fulfilment, there is a general lack of understanding vis a vis social service professionals' perception of youth needs and the degree to which it aligns with the perception of those they help, that is, the at-risk youth. The current study aims to compare the perspectives of youth and practitioners about what makes an effective intervention and the extent to which on-going programmes incorporates self-determination components. Next, we review the youth at-risk literature in Singapore.

1.2. Youth at-risk research in Singapore

Based on a media release by the Singapore police force in 2015, 3120 youths (between 7 and 19 years old) were involved criminal conduct (Singapore Police Force, 2015). As many as 68 offenders were arrested for statutory rape, that is, where a person has consensual sex with a female below 14 years old. Most of these offenders were young persons (between 16 and 19 years old). Empirical research on youth at-risk in Singapore has centered on examining offender typologies such as sexual or non-sexual offenders (Zeng, Chu, Koh, & Teoh, 2015) and their purported risks for recidivism. For instance, a study of 158 male youth offenders found that gang-affiliated offenders were significantly more likely to have histories of substance use, weapon use and violence than non-gang-affiliated counterparts (Chu, Daffern, Thomas, & Lim, 2012). Another related study of youths aged between 14 and 19 found that the majority of youths who had premarital sex lived in smaller flats (one- to three-room flats), had dropped out of school, had divorced parents, had been sexually abused, or lacked confidence to resist peer pressure (Wong et al., 2009). In a similar vein, Lee et al. (2013) conducted a 4-year longitudinal study of youth at risk (aged between 14 and 29 years) in Singapore with the aim of identifying clinical, biological, neuropsychological and social risk factors for developing psychosis by tracking outcomes of these young people. The findings largely replicated those in Western countries whereby more males than females were in the ultra-high risk group (Belknap & Holsinger, 2006). Poor school performance, family history of psychiatric illness and smoking were categorised as risk markers for development of psychosis. Childhood maltreatment (witnessing abuse or family violence) was also recognised as a major risk factor for future recidivism. Maltreated youth offenders were 1.38 times more likely than their non-maltreated counterparts to reoffend with a follow-up period of up to 7.4 years (Li et al., 2015). Another interesting study by Lim, Chan, Vadrevu, and Basnyat (2013) documented the use of social networking sites by delinquent youth at-risk and the specific influence that these online communities had on the rehabilitation process of this understudied section of the youth population in Singapore. The study found that online peer interactions can result in social affirmation and emotional support. Nonetheless, it also exposes youth to undesirable content and negative peer influence. The study highlights the differences between youth at-risk who make a firm resolve to steer away from negative online influences and those who find it difficult to resist indiscriminate accepting of friend requests. This points to the gap in the existing literature as we do not know what factors empower some individuals to transform their lives and why these resilience factors are not available to others. Descriptively, these studies make valuable contributions in extending understanding of youth at-risk groups in Singapore. However, there is little or no reference to how this target group interacts with social sector personnel or how their specific physical and psychological needs are met or unmet.

Another line of inquiry that has garnered research attention in Singapore is the prevalence of school disengagement. A study of 1027 Singapore adolescents found that delinquency, proactive aggression, and negative behaviour at school were statistically significant risk factors for reported gang membership.

When young people feel disconnected from school and have a low sense of commitment to their education, they get involved in anti-social activities, including gang membership (Ang, Huan, Chan, Cheong, & Leaw, 2015). The authors further provided some concrete suggestions on how to reduce the risk of young peoples' involvement in gangs through deeper engagement in school and other meaningful activities. In fact, an earlier study by Ang, Farihah, and Lau (2014) tested the effectiveness of an outward bound outdoor adventure programme (inclusive of constructive non-academic activities and goal setting components) and found that adolescents who had previously exhibited truancy and absenteeism from school academic and non-academic activities were much more behaviourally engaged in school up to three months after the conclusion of the intervention programme. These findings are particularly encouraging as they point towards the transformative potential of such interventions. It is plausible to expect that engagement in meaning activities or setting goals works to fulfil the adolescents' most basic psychological needs of autonomy, competence and relatedness.

It is clear that while much has been said about ways that youth at-risk may be empowered to take charge of their lives (via goal setting, meaningful activities, self-determination skills, relationship building), little is known in how such strategies play out at the ground level. In countries where the idea of using psychological needs fulfilment as a route towards optimal functioning and well-being is nascent, it is imperative to first examine whether current programmes have any potential for employing these ideas for the betterment of the youth. It is to be seen whether social service organisations working for youth at-risk are implementing any of the suggested strategies in their work, albeit under differing nomenclatures.

1.3. Relevance of the current study

It is a fact that (physical and psychological) needs fulfilment plays an instrumental role in well-being and optimal functioning (Martela & Ryan, 2016; Milyavskaya et al., 2013). If positive well-being and optimal functioning are important goals that social service organisations strive to achieve for their beneficiaries, then any efforts in order to meet these goals must pay attention to the current level of satisfaction with these human needs. Further, since needs represent innate growth tendencies, practitioners mainly need to provide facilitating conditions for these innate tendencies to express themselves (Ryan, 1995).

To our knowledge, no previous studies have attempted to seek a nuanced understanding of the needs of youth at risk from the perspectives of those who provide support to them (staff in social service organisations) as well as from the perspectives of the youths themselves. We propose that examining these two perspectives in the same study might yield very useful insights into the gaps that exist in creating a facilitating environment for the beneficiaries to flourish and grow as individuals. Alternately, we may find that existing programmes and interventions are indeed paying adequate/sporadic attention to meeting both the structural and psychological needs of their beneficiaries. In either case, such an assessment is highly relevant as it has practice implications and will generate evidence for new programmes and/or the revamping of old ones.

Furthermore, the geographical location of the current study makes it a valuable cross-cultural validation to the application of self-determination principles among youths. It is important to note that studies focusing on using tenets of self-determination for youth at-risk have only been carried out in Western countries. Moreover, as mentioned above, investigations of self-determination interventions specifically to address youth needs is non-existent in Singapore. Thus, an examination of SDT as a plausible framework to understand the needs of youth at-risk in a non-western sample would make valuable contributions to the existing scholarship in the field of youth development and youth services.

Consequently, four broad research questions guided this inquiry:

a) What psychological needs are important for youth at-risk?

b) What are the youth' experiences of the social service programmes? How are youth needs fulfilled through the programmes? What self-determination elements are incorporated in existing programmes?

c) What factors contribute to resilience and well-being among youth participants?

d) What are the overlaps or gaps between service provider and youth perspectives on pertinent needs of the youth?

2. Method

2.1. Setting

Participants were recruited via introductions made by the funding agency with partnering social service organisations. The interviews were conducted in phases with social service staff being interviewed in the first phase followed by youth interviews in the second phase. One-on-one semi structured interviews were conducted in both phases. The staff interviews lasted about 60–70 min and the youth interviews ranged from 30 to 50 min. An interview guide was used by the interviewers that asked participants to reflect on basic human needs, both biological and psychological and describe how far these needs are met or unmet in the lives of the youths (See appendix A and B for questioning route for both phases). Further, questions about popular and unpopular programmes were addressed in addition to understanding how programme features cater to youth's needs. Youth participants received an S$40 gift card for their participation and staff participants were given tote bags with research publications and magazines from the researchers' affiliating organisation as a token of thanks for their time and inputs. All adults provided written consent to participate; parental consent and youth assent were obtained for any youth under the age 18 years. Approval from the institutional review board was obtained prior to the commencement of the study.

2.2. Participants

Twenty (n = 21) interviews with social service professionals serving youth at-risk were conducted. The participants interacted with the youth in various capacities (as counsellors, caseworkers, social workers, programme supervisors and community workers) and were drawn from eight social service organisations. All social service staff interviewed interacted with the youth as part of their daily work. Staff participants were recruited through contact facilitated either by the funding organisation with social service organisations supporting youth-at-risk or by direct contacts made by the research team via email invitations to participate. Subsequently forty-five (n = 45) youth interviews were conducted with youth accessing services from various social service organisations. Youth participants were recruited through purposive sampling by liaising directly with social service staff. The reason for the higher number of youth interviews was to facilitate some preliminary quantitative correlational analysis to examine the link between need satisfaction, youth resilience and life satisfaction. For this purpose, the youth participated in an online survey prior to the commencement of the semi-structured interviews. If the youth did not have access to a computer, tablet/smartphone, they answered the survey questions on paper and pencil forms. The youth participant profiles also covered a wide range. There were youths coming from abusive family

backgrounds, youths who were beyond parental control, those who resided in impoverished environments, some displaying delinquent behaviours and yet others who faced emotional challenges in their families. Participant characteristic and demographics are displayed in Table 1a (staff) and Table 1b (youth clients).

Table 1a. Demographic details of social service staff interview participants (N = 21).

Participant characteristics	N(%) or mean (SD)
Age	31.2 (7.3)
Gender	
Female	10 (47.6%)
Male	11 (52.4%)
Position held	
Counsellor	3 (14.3%)
Social/case/youth worker	11 (52.4%)
Programme staff	7 (33.3%)

Table 1b. Demographic details of youth client interview participants (N = 45).

Participant characteristics	N(%) or mean (SD)
Age	16.3 (3.18)
Gender	
Female	21 (46.7%)
Male	24 (53.3%)
Current education level	
Primary school	1 (2.2%)
Secondary school	26 (57.8%)
ITE/polytechnic/university	10 (22.2%)
Other education institute	2 (4.4%)
Not in school/employed	6 (13.3%)
Social services accessed	
Residential home	21 (46.7%)
Community-based	24 (53.3%)
Background	
Beyond parental control	3 (6.7%)
Committed offence(s)	8 (17.8%)
Low-income family	17 (37.8%)
Outreach/referral	5 (11.1%)
Teenage pregnancy	3 (6.7%)
Vulnerable family background	9 (20%)

2.3. Measures used in the survey

2.3.1. Biological needs satisfaction (BNS)

Five items from Maslow's 5 needs satisfaction scale's (Taormina & Gao, 2013) physiological needs sub-scale were used to assess the youth participants' satisfaction with the quality and quantity of food and water the consume every day, their physical health, physical space available in their place of residence and general safety in their neighbourhood. Participants expressed their level of agreement with statements

on a 5-point likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include, "I am satisfied with the quality and amount of food I eat every day", "I am satisfied with the safety of my neighbourhood" and "I am satisfied with every aspect of my physical health".

2.3.2. Psychological needs satisfaction (PNS)

Twelve items from the Basic Psychological Needs Scale general (Chen et al., 2015) was used to assess the degree to which the participants experience satisfaction of each of the three needs (autonomy, competence and relatedness). Respondents indicated their responses to statements on a 5-point Likert scale ranging from 1(strongly disagree) to 5 (strongly agree). Sample items include "I really like the people I interact with", "I feel pressured in my life" and "People I know tell me I am good at what I do".

2.3.3. Brief resilience scale (BRS)

The brief resilience scale (Smith et al., 2008) was used as a measure of participants' self-reported resilience and ability to bounce back from set-backs in life. This scale contains 6 items that are rated on a 5-point likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include, "I tend to bounce back quickly after hard times" and "I usually come through difficult times with little trouble".

2.3.4. Life satisfaction

The Satisfaction with life scale- SWLS (Diener, Emmons, Larsen, & Griffin, 1985) consists of five items that measure the individual's evaluation of satisfaction with life in general (e.g., "If I could live my life over, I would change almost nothing"). Respondents select one of seven options (ranging from "strongly disagree" to "strongly agree"). Responses were averaged to provide a total life satisfaction score.

3. Quantitative data analysis and findings

In order to generate preliminary empirical evidence for the links between need satisfaction and well-being outcomes such as resilience and life satisfaction, correlational analysis was conducted in order to demonstrate youth who had their psychological needs fulfilled also experience a corresponding fulfilment in resilience and satisfaction with life. All correlations were in the expected direction (positive) and statistically significant except that between resilience and life satisfaction. Table 2 shows the inter-correlations of the key variables examined in the study. As shown in Table 2, need satisfaction has a strong positive correlation with resilience and life satisfaction among this sample of vulnerable youths.

Table 2. Correlation matrix for key constructs.

	A	B	C	D	E
A. Autonomy	(0.66)				
B. Competence	0.67	(0.77)			
C. Relatedness	0.45	0.48	(0.85)		
D. Resilience	0.49	0.32	0.52	(0.68)	
E. Life Satisfaction	0.69	0.66	0.41	0.27[a]	(0.84)
Mean	15.62	15.62	16.96	18.29	22.58
SD	2.49	2.86	2.71	2.91	6.57

Note: All correlations are significant at 0.01 level, reliability coefficients are given on the diagonal in parenthesis.

a Correlation not significant at 0.05 level.

In order to assess the predictive strength of psychological needs satisfaction on resilience, the resilience scores were regressed onto the overall need satisfaction score. As expected, the results indicated that the predictor (need satisfaction) explained 31.2% of the variance in resilience scores ($R^2 = 0.312$, $F (1, 43) = 19.45$, $p < .001$., An intervention study would be required to empirically test the robustness of this link.

It must be noted that the sample size for the quantitative analysis is small and these findings may not be representative of the larger population of youth at-risk. However, these analyses form a useful and confirmatory adjunct to the qualitative analysis reported next.

4. Qualitative data analysis and findings

All interviews were audio-taped with the permission of the participants. All participants were assured that their anonymity would be protected through the use of pseudonyms. The staff interviews took place at the offices of the social service organisation with a request for a space with few interruptions. The youth interviews occurred in either the residential homes where the youth were residing or their parental homes if they were co-residing with their families. Interviews were transcribed verbatim and analysed to identify prominent themes or issues that captured how their needs being met/unmet in the social service environment specifically and the larger community, more broadly. Data saturation was seen among the staff interviews by the 14th or 15th interview but we continued to collect some more insights from willing participants who had the potential to provide perceptions from a different lens as compared to previous participants due to their varied interaction with the youth. A larger number of youth interviews was warranted due to the purposive sampling procedure whereby we were interested in sampling vulnerable youths coming from varied backgrounds and situational circumstances. A process of constant comparison across participants was used to identify major themes and concepts that reflected the participants' perceptions of youth needs. Interview transcripts were systematically coded in a process that moved data from general (e.g., open) codes to more focused (e.g., selective) codes that related to the broad research questions. At first, the lead researchers separately open-coded the transcripts and resolved any discrepancies or inconsistencies in meaning via mutual discussion and consent. Then four research assistants trained in the coding system coded the verbatim transcripts using the coding system developed by the lead researchers. At first, the research assistants coded the same five transcripts in order to obtain

frequency counts for each of the thematic responses to each research question. Analysis revealed that the intra-class coefficient, which indicates the degree of consistency among the independent coders, is 0.881, which is adequate for research purposes (Shrout, Fleiss, & Hernstein, 1979).

Given the large volume of data collected, the authors chose the most relevant quotes that exemplified the pertinent themes best. Table 3a, Table 3b summarises the relevant themes from the staff and youth interviews respectively. These themes will be elaborated on in the subsequent sub-sections. The tables show the pertinence of themes based on the frequency mentioned by participants, and are complemented by qualitative quotes that show the importance and depth of themes. The reflections of the staff on their experiences referred to youths served overall and not with respect to any particular youth that they may have served or interacted with.

Table 3a. Summary of major themes emerging from staff interviews.

Themes	Total F	Proportion of themes (%)	Number of interviews
Client needs as perceived by staff	93		
Autonomy	15	16.1	11
Competence	25	26.9	11
Relatedness	40	43.0	16
Physical/biological	13	14.0	5
Client perspectives on programmes as perceived as staff	22		
Unpopular programmes	14	63.6	7
Popular programmes	8	36.4	6
Challenges faced by staff	129		
Engaging the client's family	20	15.5	12
Difficulty tracking impact	12	9.3	8
Resource constraints	30	23.3	15
Engaging the client	40	31.0	13
Others	27	20.9	11

Note. Total F is total frequency, which refers to the number of times the respective themes were mentioned in all 21 interviews (N = 21). Proportion of themes is calculated by dividing the total frequency by the total number of sub-themes mentioned under parent theme. Number of interviews refers to the number of interviews that each respective sub-theme was mentioned.

Table 3b. Summary of major themes emerging from youth client interviews.

Themes	Total F	Proportion of themes (%)	Number of interviews
Salient/most important needs of youth	53		
Autonomy	14	26.4	14
Competence	12	22.6	12
Relatedness	21	39.6	21
Physical/biological	6	11.3	6
Frustration/non-fulfilment of need	66		
Autonomy	17	25.8	12
Competence	15	22.8	11
Relatedness	34	51.5	20
Satisfaction/fulfilment of need	51		
Autonomy	10	19.6	10
Competence	12	23.5	12
Relatedness	29	56.9	25
Meeting needs through programmes	151		
Positive experience of autonomy	21	13.9	14
Negative experience of autonomy	21	13.9	13
Positive experience of competence	32	21.2	23
Negative experience of competence	1	0.7	1
Positive experience of relatedness	52	34.4	28
Negative experience of relatedness	24	15.9	14
Unpopular programmes	29		
Workshops	6	20.7	6
Study	6	20.7	5
Counselling	5	17.2	4
Sports	4	13.8	4
Strict/structured activities	4	13.8	4
Others	4	13.8	3
Popular programmes	50		
Sports, recreation	24	48.0	18
Camps and outings	14	28.0	11
Volunteering	10	20.0	6
Study	2	4.0	1
Overall impact of programmes on youth	46		
Negative Impact	2	95.8	2
Positive Impact	44	4.2	31
Areas of improvement	48		
Mentoring- relationship building	18	37.5	16
Less stringent rules	13	27.1	10
Recreational activities	5	10.4	5
Better facilities	4	8.3	4
Others	8	16.6	6
Factors for resilience/positive personal change	40		
Internal factors	20	50.0	14
External factors	20	50.0	16

Note. Total F is total frequency, which refers to the number of times the respective themes were mentioned in all 45 interviews (N = 45). Proportion of themes is calculated by dividing the total frequency by the total number of sub-themes mentioned under parent theme. Number of interviews refers to the number of interviews that each respective sub-theme was mentioned.

Physical/biological needs was a minor point in both youth and staff interviews. Both staff and clients believed that youths' basic biological needs were sufficiently met. As a result, the findings in the subsequent sub-sections focus on the psychological needs of relatedness, autonomy and competence identified by the SDT.

Overall, relatedness was the most important need for youths, followed by autonomy and competence. From the staff's perspective, relatedness was the most important, followed by competence and then autonomy. Nevertheless, when asked whether these three needs were met in their lives, the youth participants had more mentions of need frustration as compared to need satisfaction. This is a significant gap, and each psychological need will be elaborated in more detail.

4.1. Need for relatedness

For both the youth and staff interviews, relatedness came up as the most important need for youth-at-risk. From the staff's experiences, a key reason for this was the family background and experience of the youth. Many of the vulnerable and at-risk youth they had interacted with were not able to have a sense of connection or belonging with their parents at home. This could be due to many factors such as work, parental style, incarceration or conflict:

"The main reason that most adolescents end up with gangs and fall into the system of the juvenile offences [is] because they find their sense of belonging with this group of people rather than their own family. Because [for] some of them… parents don't have time for them. They always feel left out or they don't get the kind of attention, the basic needs of attention they need so they seek it elsewhere." – Quote from staff interview

Similarly, the youth participants were given a brief overview of the basic human needs (physical and psychological) that drive human behaviour. Consequently, the youth's provided thoughtful answers to the question, "what is your most important need?" As shown in Table 3b, the need for relatedness was the most strongly felt need by the participants and they frequently voiced the importance they attach to experiencing a sense of belongingness, support, care and love from others. Sample quotes below highlight the variety of social agents- friends, teachers and family, the youth see as contributory to satisfying their need for relatedness.

"So last time, because I kept failing, I kept telling myself I couldn't' do it. My primary school teacher motivated me so I gained confidence."

"Friends are most important because you can seek help when you're in trouble and stuff and they can comfort you."

"Because for me it's the most strongest bond among us. If there's more family support, there's more confidence."

Nevertheless, when it came to their frustrations with achieving relatedness, the youth primarily highlighted this lack from their parents:

"Relatedness, yeah. Sense of belonging… Maybe one thing that I miss the most I think is family? Yeah, sometimes walking down the street, I see dad, mum, two kids, and I always think, 'oh, why didn't I have a dad?' Something like that. It's in my mind. It'll be nice if my mother was still around, yeah. I think, I'm lacking of those, relatedness, and maybe I need more, yeah."

"My relationship with my father is challenging, I had a very bad relationship with him lah. He punished me. He punished me the most lah."

While not all the youth-at-risk interviewed experienced this lack of relatedness from their parents, for those who did, this affected them. From the staff's perspective, this absence of a caring adult was a key factor for the youths' disenfranchisement and disconnectedness with their lives:

"The sense of belonging, I think because at this stage, like every adole scent, they're going through finding their identity. They're going through this identity crisis, they ask questions like 'who I am, what am I here for?' therefore the sense of belonging is very important to them. Some of these youth, I would say a good number of them, because of not having a good environment at home, therefore they prefer to hang out with their friends. Some even claim that their group of friends are their family so that sense of belonging is very evident. Most of the time, if you ask them 'oh, how are your relationships with parents,' they'll be like 'they don't talk' or 'they're just not at home'. So the lack of supervision, the lack of care and concern are real for these youth. The lack of a positive adult figure and a mentor is what I see that they need… I think the sense of belonging is the main drive why they're hanging out with their groups of friends, whether or not they're engaging in healthy activities, but you know what I mean (laughs), gangs like some of their group people, it's just that they find a community that they can feel [they] belong to."

For the staff who recognise this, they mentioned the importance for the youth to have someone else be that caring adult, to mentor and befriend youth-at-risk, and lead them out of negative peer pressure or involvement. This theme of relatedness in the youth-at-risk programmes will be covered in more detail in the subsequent section on programmes.

4.2. Need for autonomy

The second highest need for the youth-at-risk was for autonomy. Notably many of the respondents also expressed the need for autonomy as especially important to them. It seems that they believe that having opportunities to make choices was important to them. The following quotes from youth clients exemplify the salience of this need for the participants.

"Freedom is most important, like because what I feel like everyone should have their own freedom to do what they want or to focus on their dreams or goals that they want."

"Freedom, because without the freedom in the life, people would not have the confidence and people can't seek support or build better relationships between people. Because without freedom, people can't go out and do stuff that can build up their confidences and seek support from other people."

"I want freedom because I mean, I don't want to be pressured to do something that I don't want to, I want to do whatever that I like?"

"I feel like freedom and choices are most important because…actually to be honest, I don't think anyone likes to be controlled, like by their parents or friends, or teachers. So I also don't like feeling that way, and I want to have my own choices of what I want to do, and what I do not want to do."

Yet, many of the youth participants experienced frustration when their freedom was curtailed, particularly as many lived with their families:

"For me, I think the issue is freedom, because I am not allowed to go out anytime or anywhere I want to go. My mother always asks me to stay at home to do some cleaning and all. Thus, I am not allowed to go out. When friends ask me to go out, such as going to ITE to play soccer, my mum always says no every time I ask her."

The staff at social service organisations, however, did not value autonomy as highly as the youths who participated in this study. Interestingly, some staff framed autonomy as a means for youth to take charge of their own development, rather than an end in itself:

"When you want to set goals, you want to set goals the child is interested in. The key thing in that is motivation. They're motivated to achieve whatever they want as the end goal and as they're looking at the end goal, we can fit in the other aspect that they need, to help them achieve the end goal. In that sense, they can see us as helping professional in helping them to reach their goals, instead of people they might have negative experience with like police or an abusive parent or things like that."

"It is also very important to make them feel empowered, to make them feel that they have responsibility and ownership, and that the success and failure of things are also attributed to their efforts and their contribution. Because once they take ownership, it creates a different dynamic because it empowers them. Hopefully it makes them realise things they didn't realise about themselves and hopefully, it even makes them aspire to dream further than just hanging out with friends."

At the same time, a number of staff acknowledged that by being in certain programmes (e.g. residential homes or guidance programmes), the youth had experienced a reduction in their autonomy:

"In terms of youth-at-risk, they fall into two categories: the BPC (Beyond Parental Control) and the probationers. A lot of times they made a bad choice and as a consequence, they're here with us. In layman terms, I think it's always easy to assume that they were given in the autonomy in the past, they misused it. Now they're here so it's important to hold back their autonomy because the idea is that they don't know what they're doing."

In this particular quote, a reduction in autonomy for the youth was even seen as beneficial from the staff's perspective. This tension over the importance of autonomy from staff and youth perspective would be elucidated in the next section on programmes.

4.3. Need for competence

Finally, a smaller number of youth participants felt that gaining a sense of competence was their most important psychological need:

"I think most important is confidence. So whenever I make a decision, I'll have my own confidence, so I won't go, "oh, am I making the wrong decision?""

"To me, if you don't feel confident, you will always be insecure about yourself and… if you're feeling insecure, your mind won't be working well."

The youths' sense of competency was linked to them feeling confident and assured of their own abilities and choices. Yet, for many of them, fulfilling the need for competence was still a work in progress:

"I would say confidence. I'm not so much in the confidence… but….since I feel like I have low confidence, I feel rather insecure most of the time, so I joined drama so I could make myself feel better about myself, try to communicate to others through speech."

"Confidence—when we talk about confidence, it's something very big. Let's say your body figure is not perfect, your facial features are not perfect, the way you study is not perfect, your values are not perfect, these things show how confident you are when you step up and speak up for yourself. It's very hard if you're not [up to] a person's expectations and to them, you are someone very different from…what they expect you to be. They want you to be what they want you to be like being pretty, very slim and very good but…we're not like that, especially for me, I have a lot of stress and my hormones change a lot and my height is quite short so people make fun of my weight also and the way I look like."

From the social service staff perspective, competency was the second most important need after relatedness for the youth. They saw many of the youth struggling with self-esteem issues stemming from school and family:

"A lot of them struggle with believing that they can achieve something... Actually, part of the profile of the youth is that they don't do well in school. When they don't do well, they're discouraged, then they don't come to school. When they don't come to school, they don't do well, then they struggle. It's like a cycle, so a lot of them have trouble believing that they can achieve anything in their life. I think this stage of youth development is also the stage where they're trying to find out what they're good at, and struggling with their self-esteem and all that."

"They are probably labelled as good for nothing: 'you are useless'; 'you're the black sheep in the family'. So those are things that they're so used to hearing, whether it's from parents or teachers or friends, so for many of them actually there's a lot of pain in them, a lot of hurt, whether it's abuse case or whether it's verbal, emotional abuse by parents. Because they're not good academically, of course you say 'what is this, you can't even study da da da'. So we try to build their self-esteem, whether it be sports related or whatever."

Importantly, from the perspective of staff, the youths' need for competency was often linked to relatedness. As the second quote points out, the lack of affirmation and validation from significant adults or friends in the youths' circle can hurt and affect the youth' self-esteem. As a result, staff aim to build up youths' self-esteem and sense of competency through the programmes.

Overall, it is clear that the frustration references for all three psychological needs outnumbered the satisfaction references.

4.4. Youth's perception of programmes

In both the staff and youth interviews, we asked participants to share about programmes the youth particularly liked and those that they did not. While the specific programmes mentioned differed, there was substantial agreement between staff and youth on what programmes were popular and unpopular.

The most unpopular programmes were those that required strict regimented actions, highly structured or with one-way didactic communication. For instance, a staff participant shared about the resistance faced by youth towards talks to 'guide' their behaviour:

"In terms of activities, they might be a bit resistant to [those] that 'address' their 'needs' like smoking. They would be [asking] 'why do I need to…' They feel that it's a waste of time because they don't see smoking as an issue. They see it as a benefit because 'through smoking, I got to know so many friends.' 'It's a social activity, when we smoke we're more calm, we're less guarded.'"

Similarly, youth clients highlighted their dislike of didactic talks and workshops that had the obvious purpose of inculcating values:

"It's the values session because normally it's a repeat of the value over and over again so people will start to get bored of it because it's [a] waste of time. Also not many people want to go as this is just a talking session. We just [look at] PowerPoint slides."

"Maybe the workshop, I forgot the thing but it's about respect… it's not that fun. Now most youth don't come for the workshop."

Besides talks or workshops that focused primarily on behavioural guidance, strict, structured programmes like study sessions and maintenance were also disliked by youth:

"[I don't like] maintenance, cleaning up the dorm."

"I don't like detention and… study hall, a bit. Because it's Monday to Friday every day."

Notably, many of these activities took place in residential programmes. Perhaps, not surprisingly, these unpopular programmes had something in common: to some extent, they curtailed the freedom and autonomy of youth.

Some youths also articulated that they generally did not appreciate counselling. When probed about the probable reason behind this unfavourable attitude, they simply dismissed the question and did not elaborate. Others found sports training regimes to be tiring and non-competitive.

On the other hand, the most popular programmes for the youth tended to be the interest-based activities. These often centred on recreational pursuits such as television, movies and sports, but also include camps and outings. As many youth participants articulated:

"For me I prefer rugby the most, because I get to meet new people and I can meet my friends during there and play together with them."

"Actually I enjoy the bowling. Because it's been a long time since I have played bowling. We go there and then we bond more, we try to get more points and beat each other, that kind. It's quite fun."

"I think the thing I like [most] is the games ah, because it's more like the team bonding and just a lot of fun."

"I do really like the screening nights. We have that every week. We can choose our own movie and watch together and stuff. I love the afternoon activities also—badminton time, gym time."

"I think when we go to like, Sentosa. Cos we went there, and they bought us our own food and stuff. We can go anywhere we want … we can go anywhere in Sentosa."

These activities were perceived by youth participants as light-hearted, memorable and fun, and also allowed the youth to bond and enjoy each other's company. Key for many of the youth was also the choice they had in these activities. Nevertheless, a small number of youth participants found the sports sessions tiring and non-competitive.

Somewhat surprisingly, volunteering was also cited by some youth as an activity they liked:

"Volunteering is my favourite because it makes me happy to see people smile. So whenever I give care back I just like to see people smile, [say] 'thank you'. I'll just want to see them smile."

"I prefer volunteering or even planning for community service because I can learn and also contribute to the society. Planning is a skill, so we can learn how to plan and how to execute and it's also beneficial for the beneficiaries."

The youth expressed a sense of fulfilment by giving back to society through volunteering. Volunteering gave them the opportunity to relate to others in the community, as well as learn new skills. While these volunteering activities were mostly organised by social service organisations, for one organisation, the youth initiated their project with the organisation's support. This alludes to the potential of giving youth greater autonomy and ownership in programmes, and will be discussed in the next section.

4.5. Meeting youth needs through programmes

To assess the extent to which the programmes and activities by the social service organisations afforded youth opportunities for satisfying their basic psychological needs, the youth narratives were coded for positive and negative (programme specific) examples corresponding to need satisfaction or frustration. It is an encouraging finding that there were generally more positive experiences of need satisfaction via programmes than negative ones (see Table 3b for a summary). Nonetheless, the negative examples highlight places where more work is needed to enhance the overall experience of youth-at-risk with the social service organisation.

4.5.1. Balancing autonomy and discipline

In the youth interviews, there were equal mentions of negative and positive examples of autonomy experienced in the programmes. As mentioned earlier in the segment on unpopular programmes, youth often mentioned the lack of autonomy in certain programmes. This was particularly for residential homes, which adhered to a strict schedule for the youth. As the youth shared:

"You know, here, we have a lot of rules. Like, for go-home leave, [if] you're one minute late, they will cut one hour. Yeah, then we get scared."

"If they cannot let us bring phone, at least let us bring bicycle in, then every time [we're] free, we can play, we can use our own bicycle. Make that kind of rule."

"Completely dislike? Um, obviously I hate chores! I mean I do chores at home, but you know, girls don't want to only do chores. But then I think it teaches me something—to be clean—it's for future sake."

The youth highlighted how a rules based system affords them fewer choices to engage in intrinsically satisfying pursuits. Interestingly, the youth participant in the third quote acknowledged that doing chores teaches her to be clean. Yet, having do chores during the residential home is something that she dislikes.

This tension between organisations implementing programmes they perceive as good and beneficial versus the youths' need for autonomy and freedom came up strongly in this study. As mentioned also in sections 4.1 and 4.3.1, behavioural and emotional guidance was a large part of programmes particularly for 'higher risk' youth. These programmes work towards remodelling youth behaviour through group work, guidance programmes, counselling and strict residential rules. While these programmes can encourage the youth towards constructive behaviours patterns, if the youth feel obligated and reluctant to attending these sessions, the impact may be diminished. As a staff described:

"Most of [the youth] try to be compliant, at least outwardly, and also because these youth are youth that have already committed offenses, generally they tend to be a bit higher risk in terms of their attitudes, like be a bit more anti-social, generally challenge following rules, authorities. When working with them, [we] possibly can encounter some resistance, but like I said, most of them are compliant outwardly because in the sense, this is a better option. Most of the time, their defiance is a bit more passive. So if there's group work, they might come but they might not speak up, or there's some that might give you the correct answers but the part about whether there's really an internal change is a question mark for some of them. I would say some of them just go through the motions."

To some extent, programmes aiming at guiding behaviour and inculcating discipline in youth are still important particularly for high-risk youth. As a result, there is a need to strike a balance between the level of structure and discipline and giving youth a sense of autonomy. A few youth mentioned how they were still able to exercise autonomy through the programmes:

"Usually if you go out with your teachers in school right, they will watch you very close and they don't let you go far. But this [organisation], they let you go around and explore, and the volunteer won't be like, 'oh no you can't go here, you can't go here'. So that gives you a bit of space you know?"

"Like the ones I've participated in right? Like volunteering and tennis, I feel like it builds freedom because we get to choose what we want and they don't force us into areas that we don't want to go in."

"Actually I don't like counselling. I said 'I don't feel comfortable'. Then they said, 'okay, we will stop this counselling, but you must promise us that every week you will share with us what's your feelings'. So they were flexible in changing the things for you. I feel good because they understand me and they change a bit of things."

These quotes illustrate how organisations can cater to youths' need for autonomy while carrying out activities such as counselling. These are not huge changes, but small tweaks such as providing some flexibility or leeway for youth to choose activities to engage in.

Furthermore, meeting the youths' need for autonomy can result in better outcomes for organisations. As some staff participants reflected:

"Services that I think are a step in the right kind of direction [are] like Youth Go! … because what they do is they are given targeted neighbourhoods and then they roam around and try to do street outreach, try to start relating to these youth. I think that is a much better pathway to relating with youth at the adolescence because you are speaking to them in their spaces, not speaking to them in your space."

"I would say [this programme] is quite well received because they're not the typical kind of engagement…classroom style. They engage the youth in different things. There was one session they did [martial arts] with the youth… It wasn't a lecture, it was just spending time with the youth, learning together and the youth could see that they were in partnership. That was good."

In engaging youth in partnership and "speaking to them in their spaces", organisations can give autonomy back to the youth, and allow them to take ownership and be involved in the programmes. This leads to the next section on competence.

4.5.2. Building competencies through programmes

Many of the programmes offered by the social service organisations included interest-based activities aimed at building the youths' capabilities in academics and sports and instilling in them a sense of confidence and mastery. It was not surprising thus that the youth participants had many more positive experiences of gaining competency than negative ones (see Table 3b). Many youth shared a substantial sense of gaining competencies at the social service organisation:

"Yeah confidence. I wasn't really confident in playing rugby, then after a few months I got better and my confidence level grew. Now I'm waiting to go for courses to get to become a coach."

"Some of the activities build confidence, like sports. Some of them have talents that build their confidence and they do better in that sport."

"I think it helps to build up the confidence… because last time I used to [be] shy…. then…there's more programmes, it helps me [be] to expose more to things."

"The dance programme also help to build confidence, because we have to perform in front of the stage, and we have to be confident to do that."

Often, participating in these activities is not only enjoyable for the youth but also builds their confidence. For the staff, these are opportunities for the youth to realise they can be good at something:

"Competence is definitely one thing we try to groom; not groom but identify with the youth like 'hey, you're really good at this you know, why don't you try out?' It could be job matching or it could be a lot of encouragement in trying to pursue something that we feel that this youth is good at but he or she is not aware of it. So we realise that when a youth is particularly good at something and they realise it, it really helps with their self-esteem and then it helps to guide them. They feel that they are able to achieve certain things in life."

"[My colleague] mentioned something about getting them a taste of success. It's also giving that sense of achievement that they really can do something. I had this boy, I saw him when he [had] a serious case of epilepsy and he had a number of attacks in school that caused him to feel demoralised because people would always see him as weak because he's got epilepsy. It made him turn into someone who doesn't speak much. He's ostracised, he's being bullied and he even walked with a slouch, like dragging his feet and it all started from when he had an epilepsy attack [a few years before] I saw him…Because he has attendance issues as well, the aim was really for him to stay on and sit for his [exams]. Towards the end of the year when I saw him for my last few sessions, it was really getting him to walk straight with that posture, getting him to walk and telling him that 'look you can do it, you don't have to slouch. Look, you can do it.' It's that little thing that gives them the sense that they can achieve something…Unfortunately he didn't score well enough to get into the course he wanted so that pulled him down a bit. He got a place in another course which wasn't in his favour, but I worked together with the parents and all, and we encouraged him to just give it a try [and] go for that first lesson, just to get a taste of that achievement. It worked very well for him. He's still in that course and he's enjoying it. So we came back to him and said 'see, if you don't allow yourself or give yourself a chance to have a taste that you can achieve something, you wouldn't be here'. This boy has this drive again."

The two quotes show the substantial effort put in by the staff to build youth competencies. Moreover, they also highlight the encouragement and guidance from the staff that go into building competencies. This need for relatedness is a crucial one, and will be elaborated upon next.

4.5.3. Building a sense of relatedness

Finally, with respect to the need for relatedness, youth report experiencing a sense of relatedness either through interaction with responsive and sensitive programme staff or the extended circle of friends formed as a result of the programme activities:

"[The staff] was the first one to talk to my parents, and when they talk, then they talk to me nicely, and they introduce themselves, they talk about how they can help. And I was also not lonely anymore, that time. And I make new friends at [the organisation]."

"There's emotional support there. [The houseparents] allow you to have your own meltdown, then they'll talk to you, calm you. [I feel] safe; basically we really feel very secured. …You don't know what will happen [at home], don't know when my brother will scream, you don't know when the food will run out and all that."

"[The people are] very warm, very kind. You literally feel kindness everywhere… I feel like I can talk to my case worker more than I talk to [my] mum."

In particular, these staff become 'caring adults' for the youth, allowing them to feel secured and supported. While mentoring and befriending needed time and patience, when relationships and trust form over time, they can make a significant impact in the youths' lives. As one youth articulated:

"[My caseworker] never gave up. There are caseworkers [who would say] 'oh we won't be rude. You don't want to open up, I cannot force you. I don't care about you, I just do my job, I do whatever I'm supposed to do and just leave it at that'. But [she was] not like that. She takes time with you, even if it's after her working hours, she's there not just doing paperwork but to come in, see you, speak to you, ask you 'how are you, how's things in school, is everything okay?' Talk about happy things, sad things, angry things, hateful things, everything. I think we really needed that kind of caseworker and she was one of them… It changed my life in a very positive manner, she found [a] place for me, she constantly reminded me that she believes in me. Every time I want to do something that I know will let her down, I will think twice about it and not do it. Things can be as [bad] as doing something crazy or doing something suicidal. I don't want her to think 'I helped you so much for you to commit suicide' because I know she's done a lot for me. It may seem like very little for her or to others, like 'she's just doing her job', but for me it's knowing that there are very different types of caseworkers and not everyone connects with you emotionally and she was one who connected. She actually went beyond her boundaries. I think she cared too much but she cannot help it."

The mentorship and friendship built between this youth and the caseworker changed the youth's life, and helped the youth get through many difficulties knowing that the caseworker was there. Indeed, the importance of building relationships and trust with the youth was also articulated by a few staff participants:

"Relatedness would probably be the most important, yeah. We feel that when have a relationship with the youth, that's when things also start moving."

"I think our role first and foremost is always to build that rapport, to reach out to youth, to let them know that we genuinely care for them and that…we just want to help them and see how they can be helped… Because at this stage, like I mentioned, they're always with their friends and if the friends they're with are

not good influences, that's the only relationship they have. So I guess for us, it's providing an alternative relationship that is better for them, yeah like people who actually tell them the more correct thing to do, compared to their maybe negative peers."

Nevertheless, because of the time and effort needed to build relationships, there were also many instances where youth participants highlighted a lack in the depth or quality of relationships, and difficulty trusting or connecting with the staff:

"My first case worker, she just wanted to get her job done. She doesn't emotionally connect with me. I couldn't trust her at all … she has a few of us under her, she would try to find out about someone through me and try to find out about me through someone so we find out about this and just cannot trust her. After her, I was given a temporary case worker and she was okay, she was nice but she also told me that I cannot expect too much from her because she's temporary, they're working… my case would be handed over to the new case worker."

"Now there are a lot of changes here and there… Like some staff are moving to the other center, some are coming here so the interaction and the bond is not there… Not so strong yet, there's some youth that left because old family is not here anymore."

"Whenever [the counsellors] ask me those questions, like if you say you feel down or you cannot manage, they immediately tell you how to cope with it, that kind of thing, so you don't feel that it's very helpful. You'd rather vent all this frustration to someone else, someone else who is connecting with you."

Despite these gaps, it was evident that the youth wanted deeper mentoring and relationship from the staff. Interestingly, when probed about which areas the youths would like to see changes/improvements in vis-a-vis the social service organisations' programmes, their responses enlisted a variety of domains that required enhancement. These were more and better academic support, allow for diverse recreational activities, better structural facilities and less stringent rules. However, the area of improvement that topped this list was the perceived need for greater mentoring and relationship building initiatives.

"Organise more camps for the youth and the children? And during the camps like, [the youth and children] pour out their feelings, what they are facing in their lives, and reach out for help. And after that [the staff will] know which kid is facing problems."

"Maybe (pauses) having more interactions during the activities that they do—they take advantage of that time to interact with the youth or the parents to talk about what their problems are."

"Yeah but sometimes when they are busy, at least they can contact [us] whenever they are free, saying, 'oh, are you okay?' Yeah, something like that."

"I think that actually, they should have more staff here. Because sometimes when I want to approach a staff—a trusted one, the one that I trust—she might not be there. It's either she's with other girls, because I'm not the only one. So I'm looking forward to that person [being] only me."

Common across these comments were the lack of time and opportunities that hindered the youth from having a deeper interaction with staff and forming trusted relationships. Unsurprisingly, the staff

interviews paralleled this finding. Client engagement, particularly in building relationships, was the greatest challenge for the staff. Relatedly, resource constraint in terms of busy staff schedules, manpower constraints and staff turnover was the second main challenge brought up by the staff. As staff participants shared:

"[The staff] don't have the luxury to be able to sit down and form a very intimate relationship with [the youth]."

"Another challenge is probably finding social workers that can stay on because many of them leave the field after a couple of years, because [of] burnout plus the fact that yeah, it's crazy, especially those working in residential homes. Maybe it's not as intensive because FSC workers you're dealing with clients who are not there all the time."

While the challenges and constraints faced by the organisations are valid, the importance of relatedness to youth highlights the need for organisations to work on this aspect. This will be elaborated further in the discussion and recommendations sections.

"Maybe organise more camps for the youths and the children? And during the camps like, they pour out their feelings, and tell us what they are facing in their lives, and reach out for help, during the camp. And after that they'll know which kid is facing problems."

"Maybe (pauses) like having more interactions during the activity that they do, they take advantage of that time to interact with the youths or the parents to talk about what their problems are."

"They can try to build up more, better relationships with the people around the neighbourhood, the people around the person they are trying to help. So they can help more people."

"Yeah but sometimes when they are busy, so at least they can contact whenever they are free, saying, "Oh, are you okay?" Yeah, something like that."

"I think that actually, they should have more staff here. Because like, sometimes when I want to approach a staff. – a trusted one, the one that I trust – she might not be there. It's either she's with other girls, because I'm not the only one. So I'm looking forward to that person is only me."

The above quotes provide compelling evidence for the perceived lack of good relationship management as well as an important area of concern for the youth. Social service organisations may do well by investing greater time and resources in developing their mentoring skills so that they can better cater to the needs of their vulnerable clients.

4.6. Overall impact of programmes

The participant's made favourable comments about the positive impact of the programme activities on themselves and the larger community. While they also report areas of possible improvements (which will be reported later), there is a general level of satisfaction with the changes that have precipitated in their lives as a result of being a part of the social service organisation's activities. Many youth reported their engagement with the organisation as instrumental in helping them come out of their shell and developing a sense of confidence in social situations. Sample quotes from youth clients are presented below:

"I think for myself, I can see through myself that I've changed, like I stopped asking for extra money, I never shout at my parents anymore, I don't scold vulgarity on my parents also"

"It has had a good effect on me because last time when I went, I keep improving my studies

"I have learnt more in life and I can teach my friends what I have learnt here such as Rugby, and other kinds of sport."

"I think staying here has made me talk to people more."

"It's a good impact because I can connect with people that I don't know and make new friends."

"It's a very like, amazing impact, because I get to go places that I don't really go that much. I do go out sometimes with my mum, but not to these kinds of places where like…cause I don't usually go to these types of places but when they bring me and I go, and I'm like, "Oh I actually enjoy this"…Ya…"

"The good impact is that I think I've changed a lot in my behaviour, my attitude and the way I communicate with people".

It is clear from the above quotes that the youths recognise the improvements that their engagement with the organisation has led to in their personal and social lives. While this is an encouraging finding, there were certain areas in which the youth would like to see improvements. These include more and better academic support, diverse recreational activities, better structural facilities, less stringent rules, and most importantly, more in-depth mentoring and relationship building. Notably, the previous sections highlighted programmatic gaps in terms of youth experiences of autonomy and relatedness. These are important areas to be addressed and the social service organisations should continue to adopt a more critical stance in evaluating their short and long-term impact on their clients.

4.7. Factors contributing to resilience among youth at-risk

It was of interest for us to explore what factors do youths regard as instrumental in their path towards reintegration, building resilience and achieving success in one or more pursuits. Specifically, we were interested in understanding whether they attribute their big and small wins to internal (dispositional) or external factors. For external factors, many participants cited the role played by various significant others such as a parent, teacher or close friend in helping them pave the way towards more optimal functioning. The quotes below are vivid examples of such external supports.

"My mum has taught me a lot of things, such as not to do bad stuff. Whenever I do bad stuff, I know I'll get scolded. I don't want to see my mum get angry or sad because of me, so I always try to make my mum happy."

"My childhood friend Help me… when I sad or what, and then like, give me, giving me advice, yeah, because when it, last time some of our friends, he will give advice, like, okay just for your idea, but he will, he will say the same thing but he will say that I will change something negative to positive, I follow him."

"Because every primary school, when I want to like, run away from classes, tuition classes, he will ask me to stop, then listen to teacher or something."

"I go through the hardships with my mu, a lot of hardships. That's why I say education is important. She herself is a PSLE holder. But then she work hard, and she also advises me, go to school and study hard now then you can, you don't have to work so hard in the future. Nowadays people don't work hard, they work smart."

"For example I guess in my academic. So like last time, because I keep failing so I keep telling myself I couldn't' do it so like my teacher motivated me so I gained confidence."

The aforementioned external resources are conceptually aligned with the need for relatedness and close external support (caring adult, peers, parent) is seen as instrumental in helping these youth build resilience and overcome challenges. This qualitative finding further strengthens the importance of relatedness as a need for youth-at-risk.

Furthermore, several participants also believed that their successes should be attributed to their internal psychological resources such as ability to engage in self-reflection and learn vicariously from observing others in similar situations, as reflected in the following excerpts:

"Because when I go Boys Home right, then I just realized I reflected all my time I was in there, then I think 'I shouldn't have done that' then just stop lah, I reflected on my own, on my own actions."

"After my father…uh…got sick, and then, you know from living in like 5 room flat, now we living in 2 room flat. It really made me think ah, if I were to grow up and live like this, If I were to have children it would be bad for them, like very small place. So from then I started to think about my future ah. Then since…when I reached sec 3, I decided what I want to be when I grow up, yup."

"Yeah, when I was here, I just… just focus on what's coming. So I told myself that if I were to run from here, I would waste my teenage life. Because I'm currently 17 this year. Yeah so I just tell myself to stay strong. I've been in here maybe 5 months already and I'm going to discharge in 3 months, then the time will fly fast."

"I want to be a successful woman and can make my mother proud. Because all these while I've made her down… so I want to prove to her that I can be a successful person.

"Because when I came here… separation makes us realize how much we need them. Earlier, I always put friends first. Always wake up, go out, come back late and never really think about my mother, but then when I'm here, I think back – she sacrificed a lot for me, and my friends don't. I just realized."

While these realisations may have come in part from external factors, this finding highlights the ability and desire for youth to take charge of and move ahead in their lives (sense of agency and self-authorship). For social service organisations that aim to change or guide the behaviour of youth-at-risk, their task hence is to facilitate an environment where these external and internal resources of youth can flourish.

The quantitative findings reported in section 3 provide additional evidence to suggest the potential role of psychological need satisfaction in building youth resilience.

5. Discussion

The voices of the youth and social service staff catering to these youth add to the existing literature on youth at-risk in Singapore by showing that psychological needs are central to positive youth outcomes and development. The narratives support the SDT framework as valuable in examining youth perspectives. First, both the quantitative and qualitative results of the current study support the core ideas of self-determination theory. Specifically, SDT postulates that satisfaction of the basic psychological needs of autonomy, relatedness and competence facilitates a host of positive personal and social outcomes for youth (McDougall, Evans, & Baldwin, 2010; Vansteenkiste, Ryan, & Deci, 2008). In the current study too, the regression analysis shows that overall need satisfaction is a significant predictor of resilience. The youth also concur with the idea that psychological needs are essential needs and play an important role in their overall functioning. Further validation is provided by the examination of the most important needs articulated by the staff and youth alike.

5.1. Relatedness as most important need for youth

There was a resounding agreement between all participants about the importance of experiencing a sense of relatedness in the lives of these youth. More specifically, the youth participants shared how they experienced frustrations meeting this relatedness need in their families, and the staff highlighted how this frustration was a key risk factor for the youths (refer to section 4.1 above). The social service staff believed that the most important need for youth was relatedness, particularly connecting with and having the presence of a caring adult. The staff place considerable importance on this need in the youth' lives. They mention how having relatedness acts as a resource and safe base for youth to explore the world, while its lack makes them feel lonely and dejected.

The need for relatedness is fulfilled by social agents in the environment of the youth such as parents, friends, teachers and other members in the community. For vulnerable youth who routinely access services of social service organisations, the staff of such organisations become an important route through which this important need may be fulfilled. However, this study highlights the apparent mismatch between the youth' most important needs and the programmes and activities offered. Additionally, there are consistent references to the lack of long-term meaningful relationships with social service staff. Noteworthy in this regard is the collective voice of youth in favour of increased mentoring and befriending activities when probed about the potential areas of improvement in service delivery. This is particularly true for the residential social service organisations. It seems that vulnerable youth look for a certain emotional quality (rather than quantity) in their interpersonal contact with the staff. Staff turnover may seem to be a challenge that the organisations have to grapple with but it is clear that the irregularity of meaningful staff support is a concern for the youth as well. Relationship supportive behaviours include being warm with the clients, showing interest in their activities, showing a genuine liking for them and providing them with support and care (Rocchi, Pelletier, & Desmarais, 2017). While, there were accounts of such interactions with some caseworkers, they were few and far between.

Conversely, relatedness thwarting behaviours include being distant from clients, not listening to them, not being available or not including them in activities (Rocchi et al., 2017). Unfortunately, one or more of these behaviours have been demonstrated by social service staff (see section 4.5.3 above). Considering that these youth come to access the social service organisations programmes with their own baggage of troubled relationships (as evidenced by excerpts in section 4.1), the social service organisation may be doing a disservice if they do not pay explicit attention to this aspect of their client well-being. Nonetheless, this is not to imply that the staff are neglecting this need altogether or do not wish to provide

a need supportive environment to the youth. They too, recognise this as an important requirement for healthy re-integration for the youth but are facing recurrent challenges in journeying with the youth on a long-term basis. Most of these challenges center on a high number of caseload, staff turnover, lack of resources and time. While all of these staff challenges are valid, there is definitely scope for educating 'all' social service staff who routinely interact with the vulnerable youth in whatever capacity (as counsellors, caseworkers, social workers, programme managers, duty officers) about the critical importance of the need for relatedness and how they may develop their interpersonal skills further so that they convey a sense of interest, liking and support to their clients. Extant literature is packed with the cross-cultural evidence for the importance of the need for relatedness and its salutary effects on individual well-being and health (Deci & Ryan, 2000; Jiang, Zeng, Zhang, & Wang, 2018; Timothy Church et al., 2013). For example, Luyckx, Vansteenkiste, Goossens, and Duriez (2009) elaborated on how the need for autonomy is an important component of adolescent identity formation. Given the research evidence, validated by the findings of the current study, an important implication is that social service professionals who try to pay close attention to how a youth's basic need for relatedness is fulfilled on a daily basis will go a long way in helping these vulnerable youth feel heard, loved and cared for.

5.2. Importance of autonomy need satisfaction for the youth

In addition to the importance placed on relatedness, the youth respondents made repeated references about how they had limited opportunities to experience autonomy in their lives. Autonomy refers to experience of volition and meaningful choices in one's lives. Again, this need seems to be a greater challenge for youth accessing services of residential type of social service organisations. While the need for discipline and decorum is understandable, the key lies in the way in which such disciplinary measures are implemented. Forceful and stringent enforcement of rules for which no clear rationale is provided are unquestionably abhorred by youth.

On the other hand, participants are particularly appreciative of instances where they were given autonomy in the form of choices (alternative course of action) that made them feel that they are trusted to make responsible choices and involved in making decisions about trivial and important aspects of their lives (refer to section 4.4.1 above). The centrality of autonomy in the lives of youth cannot be underestimated. Adolescence is a critical period during which youth begin to feel the need to engage in self-endorsed actions and experience a sense of autonomy. The self-determination conceptualisation of autonomy excludes the rebellious defiance in order to establish one's individual independence. In a healthy development trajectory, stable autonomy can be achieved without any exaggerated sense of defiance to social norms and constraints. This is possible, when youth are given opportunities to experience recognition for various forms such as emotional (emotional support and attention), moral (fair and equal treatment) and positional (perceived sense of importance, significance and worth in the community) recognition (Brezina, Heitmeyer, & Legge, 2008).

In the current study sample, autonomy is not only one of the most important needs perceived by the youth, it is also among the non-fulfilled needs for these vulnerable youth. According to Vansteenkiste and Ryan (2013), one of the costs of need frustration is to engage in maladaptive mechanisms to cope with the need frustration. This may take the form of compensatory behaviours such as substance abuse and oppositional defiance among autonomy deprived youth. Further, there is research evidence to suggest that pressured forms of self-control use up higher amounts of energy as compared to self-endorsed self-control (Moller, Deci, & Ryan, 2006). For example, a teenager who willingly regulates her truant behaviour is more likely to find it less psychologically tiring as compared to another who feels forced by guilt to do so.

The challenge lies in striking a balance between the level of structure in the programmes and youth's expressed need for choice and freedom. Based on the analysis of the substantial agreement between staff and youth on popular/well-received programs versus those that were unpopular and met with resistance on part of the youth, it can be seen that the most unpopular programs were those that were highly structured and were delivered in lecture style didactic modality. Conversely, there was a clear preference for activities that allowed for more innovative, engaging and creative methodologies. Such resistance on the part of the youth is indicative of their felt need for autonomy and choice.

Thus, providing choices and acknowledging client perspectives may take social service staff a step closer to aiding the fulfilment of the need for autonomy among these vulnerable and sensitive youth.

5.3. Psychological need satisfaction and youth resilience

The current study explored how need satisfaction might be related to resilience and well-being indicators such as life satisfaction. For this purpose, the quantitative data was subjected to correlation and regression analysis, both of which showed that satisfaction of psychological needs is positively associated with resilience and life satisfaction and that psychological need satisfaction is a significant predictor of resilience. These quantitative findings were also echoed by the qualitative results. When probed about what qualities set apart resilient youth from their non-resilient counterparts, the social service staff almost unequivocally suggested the important role played by a caring adult in their lives. Role models in the form of teachers, social workers, peers or parents play an important role in predicting success of these youth in achieving positive outcomes in the future. In a sense, they highlighted the need for relatedness as a potent factor in encouraging resilience. Interestingly, staff also pointed out the importance of an internal self-motivation to be a factor that aids in their eventual reintegration.

The youth themselves also attributed their potential for positive change and growth to a combination of internal and external factors (refer to section 4.6 above). For instance, they concurrently recognised the importance of internal psychological resources such as values and intrinsic motivation as well as the pivotal role-played by significant others in helping them gain confidence and building feelings of self-worth. These findings are in line with previous research showing that autonomy supportive environments act as buffers against the ill effects of needs thwarting (Vansteenkiste & Ryan, 2013). There is an urgent need to build upon these factors that promote resilience and could protect against the negative consequences of the often troubled and challenging situations prevalent in the lives of these youth.

It is reasonable to expect that the awareness and assimilation of self-determination principles is required at a societal level whereby parents, schools, communities and social services all come together to provide youth with environments conducive to healthy growth and development. However, there is no reason why any of these entities can make a beginning in their own small way based on their respective capacities and capabilities.

What follows is a set of recommendations that social service organisations can attempt to incorporate in their organisational framework so that they can provide better care and support to their clients, in this case, youth at-risk.

6. Recommendations

It should be noted that these are preliminary recommendations based on the findings, which may be adjusted based on the organisations' context and capacity.

Two key gaps in service provision were identified, namely:

- Difficulties for youth in achieving meaningful relationships in organisations
- Difficulties faced in providing youth with an 'autonomy-supportive' environment to facilitate their personal development and growth

These recommendations are aimed at the system as a whole rather than for individual social service organisations.

6.1. Greater attention and resources to be channelled for building relationships

To more effectively support the youth's pressing need for relatedness, organisations should ensure that they focus on meeting this need. As a first step, the importance of building relationships, giving youth a sense of belonging and displaying genuine concern for them should not be the responsibility of only the staff with greatest interaction with the youth (e.g. programme staff, counsellors, social workers). It is important for this attitude to permeate the entire organisation with all staff treating this as a priority.

Specifically, support for relatedness may be provided by incorporating the following in the staff's interaction with the youth (Silva, Marques, Guerin, & Teixeira, 2014):

- Empathy- Seeing the situation through the client's perspective
- Affection- Showing genuine appreciation and concern
- Attunement- paying attention to the client and gathering knowledge about him/her
- Dedication of resources- volunteering time and energy
- Dependability- availability in case of need

While there may be limited opportunities to do so, but wherever possible, staff may work to highlight these strategies to parents who are willing to engage. Raising awareness among parents will help to provide the youth a supportive environment within their families as well. It may be highly beneficial to invest time and resources in developing a stable befriending and mentoring programme which will help to plug this gap in a structured manner. Careful selection of volunteers who may be able to relate to youth better/differently from, the staff due to closeness in age, profile or being more neutral and not affiliated to the organisation. Research has shown that youth-initiated mentoring relationships enable them to develop meaningful and impactful connections (Spencer, Drew, Gowdy, & Horn, 2018).

6.2. Respect the need for autonomous regulation among youth

Besides providing a sense of relatedness, organisations should also make efforts to respect the need for autonomy among these young persons. This might be particularly challenging given the concurrent need to maintain rules and regulations in the interest of discipline and smooth administrative functioning.

However, autonomy support need not be in conflict with setting order and regimen. What is required is a sensitive approach that delivers such rules in a less stringent forceful manner.

Specifically, support for autonomy may be provided by incorporating the following in the staff's interaction with the youth (Silva et al., 2014):

- Relevance- by providing a clear and meaningful rationale for activities, facilitating self-endorsement
- Respect- acknowledging the importance of the client's perspective, feelings and agenda
- Choice- encouraging them to follow their interests and giving choices whenever possible
- Avoidance of control- not using coercive, authoritarian and guilt inducing language and methods

Besides autonomy supportive interactions, autonomy related elements may be incorporated in the programme content and activities as well. This means steering away from didactic approaches and replacing them with creative ways to deliver the same content. For example, instead of conducting a one-two hour lecture on the health hazards of smoking, youth may benefit from other methodologies such as short films, role plays, analysis of case vignettes that may allow them to critically analyse the deceiving benefits and the authentic disadvantages of smoking to their personal health, family life and the environment.

Providing an autonomy supportive environment is possible only if social service staff and management are open and willing to try out newer and somewhat challenging ways to interact and engage with their youth clients.

6.3. Using SDT as a methodological advance for programmes/assessment

This recommendation calls for a more focused and nuanced use of self-determination theory as a framework to cater to the unmet needs of vulnerable youth. If autonomy, relatedness and competence are accepted as basic psychological nutriments, then social service professionals may reckon that by promoting these, they are creating conditions for personal change that go beyond mere 'behaviour' change (Silva et al., 2014). SDT's mechanism of action and its component techniques invariably focus on developing a motivational climate that is 'need supportive'. Such a focus will lead organisations to play a meaningful role in the growth and development of youth at-risk. SDT based interventions have been used as action levers to promote positive youth development (Field, Hoffman, & Posch, 1997; Wehmeyer et al., 2000). Following from these robust applications of the SDT to facilitate positive youth outcomes, the social services sector will be able to enhance their effectiveness even further.

7. Conclusion

This research is not without its limitations. First, qualitative data relies on the researcher's interpretation of comments and statements made by the respondents, introducing a subjective bias. As a result, the findings drawn may be open to differing interpretations by other scholars and practitioners. Further, the study aims to provide depth of insights rather than be representative of the youth-at-risk and social service staff population at large. Moreover, since the study interviewed youth-at-risk who access services of social service organisations, the profile of youths interviewed may differ from youth-at-risk who do not access social services. Finally, there is the possibility of social desirability bias particularly for the self-reported surveys and interviews. While measures were taken by the researchers to assure confidentiality

to the participants, given the sensitive nature and vulnerability of the youth-at-risk interviewed, the youths may have answered questions to show a more favourable or desirable response.

In conclusion, the youth narratives support the idea that self-determination needs are essential needs and play an important role in their overall functioning. The most important needs articulated by the staff and youth alike was the need for relatedness. Summing up, this study makes an important call for action. Social service organisations addressing youth-at-risk issues need to take the lead in being the flag-bearers of responsive, sensitive and effective servicing. By making attempts to incorporate the self-determination recommendations of this study in their work, they may come a step closer to addressing the needs of their clients in a more effective manner. We hope that this piece of research opens up opportunities for further research as well as a possible path to addressing the needs of youth at-risk in a more efficacious manner.

Conflict of interest

Tania Nagpaul and Jinwen Chen declare that they have no conflict of interest with regards to the authorship of this article.

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