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# Peer Social Networks After the Transition to Secondary School : Adolescents' Perspectives

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Running Head: ADOLESCENT PEER NETWORKS

Peer Social Networks after the Transition to Secondary School: Adolescents'

Perspectives

Angela E. Rowland

A Report Submitted in Partial Fulfilment of the

Requirements for the Award of

Bachelor of Arts (Psychology) Honours

Faculty of Community Studies, Education and Social Sciences

Edith Cowan University

28 October 2002

Declaration

I declare that this written assignment is my own work and does not include:

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## Abstract

The transition from primary to secondary school has a considerable impact upon the social and academic lives of adolescents. An adolescent's sense of belonging (SoB) is important for determining school satisfaction and success during this transition. As SoB is partly developed through an individual's peer social network, this study explored the peer social networks for adolescents who have a SoB. Using the Psychological Sense of School Membership (PSSM) scale (Goodenow, 1993a), five females and three males with a high SoB completed sociological maps and participated in interviews in order to determine the structure and function of their peer social networks. The results indicate that peer social networks contribute to SoB primarily through their structure and the psychological functions they serve. Key results include the finding that those networks which have a degree of stability, and those in which the adolescent is able to identify a close friend whom they trust, are most valuable for promoting SoB. The value of having friends with whom the adolescent feels a sense of history was reported to be particularly important by the adolescents in this study. Furthermore, the results indicate that there is no single structure of peer social networks that is most valuable in promoting SoB, as it is the psychological function of the network itself which fosters a SoB. Several areas for future research are identified, including a comparison between those students who report lower SoB at school and those who report high SoB, and a longitudinal study analysing trends in peer social networks across the school year after the transition to secondary school.

## Declaration

I certify that this thesis does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature:＿█████████＿＿＿＿＿

Date:＿ 30·01·03 ＿＿＿＿＿＿

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Introduction

The transition from primary to secondary school has been found to have a considerable impact on the social and academic lives of adolescents (Berndt & Keefe, 1995), and it has been found that the largest decline in perceived quality of school life occurs during this transition (Schumacher, 1998). Whilst the transition may have a positive impact by providing an opportunity for renewed academic engagement, the transition may also result in more negative academic outcomes due to the disruptive effect it has on the social and educational environment of the young adolescent.

Research has found that adolescents report numerous stressors associated with moving to a new secondary school which include finding one's way to classes, getting to class on time, keeping up with school work, and personal concerns such as making new friends (Schumacher, 1998). In addition, the transition to secondary school has been found to significantly disrupt the peer social networks of adolescents (Hurrelman, 1990; Urberg, Degirmencioglu, Tolson & Halliday-Scher, 1995) primarily through the necessity of re-negotiating existing social networks or the requirement to form entirely new networks within a new school environment (Ryan, 2001).

The transition to secondary school is a stressful life event for adolescents primarily because it occurs at a time when significant psychosocial changes are occurring. Aspects of the secondary school environment that have been found to be particularly challenging are changes such as the increased responsibility of secondary school learning, the move from a small class size to a larger and more impersonal class size, change from one teacher to many, the introduction of a more heterogenous group of peers, and an increased focus on academic achievement (Santrock, 1994).

Whilst adjustment to a new school environment is a multi-faceted process (Berndt & Keefe, 1995), the ability to cope well with this adjustment may be aided by adequate social connections with peers. There is a direct correlation between an adolescent's adjustment and the ease or otherwise of their friend's adaptation, as well as by the features of their social networks at school (Berndt & Keefe, 1995). Furthermore, issues of being included and accepted are dominant when an individual moves to a new environment, and until individuals negotiate their place in the new social setting, they have difficulty attending to other tasks at hand, such as school work (Goodenow, 1993a).

*Adolescence*

It is important to also consider that the transition to secondary school occurs during a particularly challenging stage of the life cycle, that of adolescence. Adolescence has been described as a transitional period, linking childhood and adulthood (Santrock, 1994). Although the onset of adolescence varies between individuals, early adolescence is generally considered to be between the ages of 11 and 14 years (Bee, 2000), and is the beginning of a period of significant psychosocial changes. These changes impact upon the way in which the individual perceives and interacts with their social environment.

A very important psychological task of adolescence is the development of identity. According to Erikson's (1974) theory of psychosocial development, adolescents face the psychological task of integrating their past and present experiences in order to form a more concrete self identity (Santrock, 1994). The process of identity development presents challenges of confronting and negotiating new social roles. According to Erikson, identity must be searched for, and since identity can be found only in interaction with significant others, a process which Erikson calls psychological reciprocity, an adolescent will go through a period of need for peer group recognition (Muuss, 1996).

Peer groups provide both role models and personal social feedback that adolescents use to develop their own identities (Muuss, 1996).

Cognitive skills also undergo significant change during adolescence. Adolescents acquire a new consciousness of themselves and of other people, and an enhanced ability to understand other people (Berndt, 1982). Piaget (1950) understood these changes to be reflective on an individual's entry into formal operational thinking in which there is increased capacity to think abstractly, and this enables adolescents to crucially evaluate their own thoughts and feelings, as well as those of others (Muuss, 1996). These cognitive changes impact upon friendships through creating an enhanced capacity to understand the thoughts and feelings of other people (Berndt, 1982).

Given these significant changes, it is not unusual for downward trends on numerous psychological factors such as self esteem and optimism to be observed at this time (Baker et al., 1997; Berndt & Keefe, 1995). However, not all adolescents experience negative trends (Goodenow, 1993a) and numerous protective factors act to buffer the individual against such negative outcomes.

Protective factors which have been firmly established as being at the core of psychological well being in adolescence include optimism, self esteem and adequate coping skills (Battistich et al., 1997; Benard, 1995). However, more recently the value of having an overarching sense of belonging has gained recognition as being a particularly salient factor for facilitating well being during adolescence (Goodenow, 1993a).

*Psychological Sense of Belonging*

Sense of belonging (SoB) may be defined as the extent to which adolescents feel accepted, supported, included and respected in their environment (Goodenow, 1993a). Psychological SoB is influenced both by individual personal traits, as well as by

situational factors (Goodenow, 1993b). Over the course of the life span, a sense of

personal acceptance and of having a valued place in a variety of social settings becomes

more stable, however in early adolescence, this sense is not strongly developed

(Goodenow, 1993b). For this reason, young adolescents are susceptible to both positive

and negative influences in the course of developing a SoB and social identity

(Goodenow, 1993b).

The need to belong has been embedded in psychological research for decades,

stemming from the work of Adler (1939) who concluded that all human failings originate

from an underdeveloped feeling of belonging to the community. Later, Maslow (1954)

identified the need to belong as a key psychological need and believed a lack of

belonging to be the basis of much emotional distress experienced by an individual.

Furthermore, the work of Ainsworth (1989) on attachment bonds presented valuable

information on what many consider to be a biological need to have strong and stable

attachments to others. Ainsworth's work, although only briefly conducted on early

adolescence, nevertheless highlights the intrinsic need to be connected to significant

others.

More recently the need to belong has been explored and discussed in terms of self

determination theory which holds that people have three basic psychological needs,

namely the need to be engaged in meaningful social relationships with others, to have

appropriate autonomy and self-direction, and to be competent (Baker et al., 1997).

To date the most reliable measure of SoB in adolescents is the Psychological

Sense of School Membership (PSSM) scale (Goodenow, 1993a), which is a measure of

individual SoB in the school context, and is designed to be used with adolescents

between the ages of 12 to 16 years in the middle and secondary school setting. The PSSM

scale consists of 18 items and has been found to exhibit high internal consistency for samples of middle school adolescents, and sound construct validity (Hagborg, 1998).

However, the PSSM scale has been criticised on the grounds that it is a multidimensional measure, taking into consideration factors of belonging, rejection, and acceptance. Hagborg (1998) suggested that the scale should be refined in order to create a more unidimensional measure of SoB, and has developed a shortened version which has demonstrated consistent findings, but is yet to be assessed as widely as the PSSM. Regardless of this criticism, the PSSM scale has been particularly useful as a measure of school adjustment as its results have consistently mirrored those reported in research studies, particularly in terms of students who rate as having higher SoB at school (Hagborg, 1998).

*Sense of Belonging and the School Environment*

Students who rate higher on the PSSM scale are consistently found to be more motivated, have more positive self concept, feel greater school satisfaction, have higher academic performance, report greater school commitment, have more positive teacher-student relations and have lower social-emotional distress (Goodenow, 1993b; Hagborg, 1998).

Most of the research on adolescent networks is performed in the school context (Levitt, Guacci-Franco, & Levitt, 1993). The experience of school is undoubtedly an important influence on psychological development as this is the environment in which much social learning takes place (Adler, 1939; Hurrelman, 1990). Research indicates that adolescents spend a significant proportion of their time at school and participating in extra-curricular activities related to school (Battistich, et al., 1997). Therefore the

experience of school is likely to be more enjoyable for those students who feel they belong.

A supportive social network at school can also play a key role in protecting the adolescent from negative experiences in the home or in other contexts outside of school by providing an environment in which the adolescent may feel supported and valued (DuBois et al., 1992). It has been found that those adolescents who fail to develop a SoB in the school context may seek membership in an antisocial group in order to meet this need to belong (Baker et al., 1997; Beck & Malley, 1998).

The traditional school structure focuses primarily on individuals and fostering their individual academic achievement, rather than on encouraging a sense of community to be developed between students and their peers and teachers (Arhar & Kromrey, 1995). For this reason, schools have been dubbed "societies of strangers" (Arhar & Kromrey, 1995, p.72). Those schools which recognise that academic learning takes place in a social context and focus on building relationships in response to this, adopt a relational approach to education (Baker et al.,1997). It has been suggested that relational approaches to education are more beneficial for building a sense of togetherness, and in turn enhancing an individual's feeling of belonging (Baker et al., 1997). It is important to keep in mind that children and early adolescents emphasise their relationships with people as being an important factor for making them feel like a part of a community at school, which further provides support for the significance of strong connections to others as an important avenue through which SoB develops (Pooley et al., 2002).

Furthermore, SoB at school is also important for academic motivation, commitment and achievement, as the transition to secondary school often marks the point of either engagement or withdrawal in school work (Goodenow, 1993b). Numerous

research studies conducted on school retention have demonstrated that the degree to which adolescents feel that school work holds value for them is significant in determining positive or negative educational outcomes (Anderman & Anderman, 1999; Baker et al, 1997; Arhar & Kromrey, 1995). Developing these positive academic values and the motivation to achieve them is partly a function of the adolescent's SoB in the school context (Baker et al., 1997).

Throughout secondary school it has been found that students have difficulty sustaining academic engagement in school environments within which they do not feel personally valued and supported (Goodenow, 1993b). These findings have been replicated by preliminary research suggesting that retention rates and student satisfaction may be higher at those secondary schools which adopt a relational approach to education (Baker et al., 1997; Finn, 1989).

There are several processes by which feelings of belonging influence the acquisition of academic values and motivation for academic achievement. Firstly, given the increased significance of peer networks and the great pressure for peer conformity during early adolescence, an adolescent's friendship network is a critical determining factor in the development and maintenance of academic values (Ryan, 2001). Adolescents who have more positive reports of their friendships have been found to be better behaved at school and express greater academic engagement than those adolescents who describe their friendships less favourably (Dubow & Tisak, 1989). Furthermore, adolescents tend to hold similar academic values to their closest peers (Dubow & Tisak, 1989), which additionally points to the process of mutual influence in adolescent friendships and the importance for adolescents to have friends with positive academic values.

Feelings of belonging have also been found to contribute to academic success by influencing the adolescent's cognitive processes. Those adolescents with a high SoB are found to have higher expectations of success (Goodenow, 1993b). It is thought that this enhancement of success is built through developing a belief in one's own skills, as well as through the knowledge that one has the social resources available to overcome difficulties (Goodenow, 1993b). One of the ways of developing and maintaining healthy feelings of belonging is thorough increasing the strength of the adolescent's peer social networks at school.

*Social Networks*

Social networks are defined as the "...web of relationships in which individuals are situated throughout their life course" (Degirmencioglu, Urberg, Tolson & Richard 1998, p.313). The development and maintenance of positive social networks is strongly related to developing psychological health in terms of boosting self-worth (Berndt & Keefe, 1995), strengthening resistance to antisocial behaviour (Hurrelmann, 1990), acting as a buffer against negative aspects of life stress, and assisting individuals to cope with life transitions (Ryan, 2001), such as the movement to high school.

Social networks are in a constant state of flux during an individual's lifetime. A model proposed to assist in understanding how social networks simultaneously change and provide a sense of continuity, is the social convoy model (Levitt, Guacci-Franco, & Levitt, 1993). The social convoy represents the social networks an individual finds him or herself involved in throughout life, and serves the purpose of providing a continuous support system (Levitt, Guacci-Franco, & Levitt, 1993). The social convoy changes across normative life events such as the transition to high school, as well as through non-normative life events and general age related maturation (Levitt, Guacci-Franco & Levitt,

1993). Therefore the social convoy changes significantly, particularly during later childhood and early adolescence, although it always serves its purpose of providing continuous emotional support (Levitt, Guacci-Franco & Levitt, 1993).

As stable networks are particularly valuable in assisting individuals in negotiating stressors associated with life events, it has been proposed that the transition to secondary school may be more successful if adolescents are able to maintain some stability in their social networks.

During early adolescence an individual's social convoys undergo normative changes which include the emergence of peers as a significant source of psychosocial support (Levitt, Guacci-Franco & Levitt, 1993). This shift in focus of social networks shifts from primarily family based to peer focused is thought to occur as the adolescent strives to develop greater independence and autonomy in moving towards adulthood (Cairns, Leong, Buchanan & Cairns, 1995; Furman & Buhrmester, 1992). However other researchers believe that adolescents become no more autonomous during adolescence than in childhood; their source of guidance and support has simply changed from the family to peers (Cairns et al., 1995). Adolescents may also have a greater reliance on friends in an effort to satisfy a psychological need for a support system with greater equality between members (Furman & Buhrmester, 1992). From all perspectives it appears that those peers an adolescent considers as 'friends' are a very important source of emotional support.

Three levels of adolescent networks have been described, namely best and close friends, groups, and isolates (Degirmencioglu et al., 1998). The primary focus of most adolescent networks are best and close friends, which are characterised by the highest level of intimacy and reciprocity, and are considered as the central locus of influence

(Mounts & Steinberg, 1995). The social convoy model views best and close friends to be providing the highest levels of psychosocial support in an individual's social network (Levitt, Guacci-Franco, & Levitt, 1993). The literature indicates that best friends are often embedded within larger social groups and are less dynamic than groups of friends (Degirmencioglu et al.,1998).

Many adolescents are also members of a group in which there are different relationships of varying strengths. For example, groups have been researched in terms of their cohesiveness and ability to adapt to change, that is, the entry and exit of group members. Results indicate that some adolescents are not part of a group and they tend to be either part of a dyad pair, or isolates who consider themselves not to have any close friends (Degirmencioglu et al., 1998).

For both males and females, adolescent friendship networks are also found to be dominated by same sex friendships, which may be particularly intense during early adolescence (Berndt & Keefe, 1995). These friendships are important contributors to social development and have been found to be particularly influential in shaping the development of personality, social skills and social behaviour (Berndt & Keefe, 1995; Cairns et al., 1995).

In terms of gender differences in adolescent friendship networks, researchers suggest that females tend to prefer smaller friendship groups and are more likely to form dyad pairs (Urberg et al., 1995). Males are generally less scrupulous in their definitions of who is a friend and who is not (Berndt & Hoyle, 1995), making their social networks more extensive than that of females. Whilst males are often found to have more extensive network connections, females tend to report more stable friendship networks as they appear less willing to expand their network to include other friends, particularly in dyadic

friendship situations (Berndt & Hoyle, 1995). In addition, adolescent females appear to

place greater emphasis on similarity between friends and the importance of the best or

close friend than do adolescent males (Berndt & Keefe, 1995).

The growing awareness of identity during adolescence challenges the basis upon

which childhood friendships are developed, that of shared interests and opportunities to

interact (Berndt & Hoyle, 1995), so that greater discretion is utilised in determining

which peers are considered 'friends' and what needs require to be met in order to consider

a peer a friend. In defining friendship, adolescents most frequently report the need for co-

operation, reciprocity, trust, and a feeling of being understood (Ainsworth, 1989).

*Adolescent Friendships*

In studying adolescent friendship networks, four particular features have been

identified as recurring themes. These are intimacy, mutual responsiveness, similarity

between friends and stability and change in friendship networks (Berndt & Hoyle, 1995).

*Intimacy.* Intimacy is a central feature of friendship and refers to the personal

thoughts and feelings that friends share with each other (Berndt & Hoyle, 1995). It also

refers to the actual knowledge of the personal information of friends, such as their

worries or fears (Degirmencioglu, et al, 1995). For adolescents the value of intimacy lies

in its ability to promote feelings of self worth that other people are interested in what the

individual thinks and feels, the development of social skills which are necessary for

intimate relationships throughout life, and for acting as a vehicle to reduce anxiety about

physical and emotional changes occurring at that stage in the life course (Levitt, Guacci-

Franco & Levitt, 1993).

Furthermore, it has been found that friendships high in intimacy and emotional

support have positive effects on psychological adjustment and coping with stress (Berndt

& Keefe, 1995). Theorists have debated how and when intimacy in friendships develops, and it has been found that there are consistent developmental changes in intimacy of friendships across childhood and early adolescence that appear to be related primarily to cognitive development which enables adolescents to understand and take interest in other people's experiences (Santrock, 1994). Additionally, changes in intimacy have been related to changes in the social environment, most notably within the school context (Furman & Buhrmester, 1992). However the most solid information about the role and development of intimacy has come from questioning adolescents.

In a study by Bigelow and LaGaipa (1980), children and adolescents responded to open ended questions about friendship. They found that between middle childhood and early adolescence there was a steady and significant increase in comments about the sharing of thoughts and feelings, and having an intimate knowledge of a friend (Bigelow & LaGaipa, 1980, cited in Berndt, 1982). However, this study also found that references to intimacy in friendship increased but did not peak during early adolescence, rather the peak was at sixteen years of age (Bigelow & LaGaipa, 1980, cited in Berndt, 1982). This finding suggests that early adolescence may be the point in which intimacy becomes an important aspect of friendship.

Expression of intimacy has been found to differ between males and females. In a variety of studies, females are found to make more frequent references to intimate conversations, intimate knowledge of friends and express more concern about faithfulness and trust in friendships (Cairns et al., 1995; Furman & Buhrmester, 1992). However, it is interesting that gender differences are not found in adolescent's ratings of their intimate self disclosure or knowledge of a best friend (Berndt & Hoyle, 1995; Sharabany, Gershoni, & Hofman, 1981), suggesting that the same level of intimacy may

be experienced by males and females, however it is the way in which the intimacy is conveyed that is the point of difference.

*Mutual Responsiveness.* Closely related to intimacy is the responsiveness of friends to each other's needs, often referred to as mutual responsiveness (Degirmencioglu et al., 1998). Specifically, mutual responsiveness has been studied in terms of both sharing and competition between friends. With the development of increased intimacy in friendships during middle childhood and early adolescence, competition is often replaced with a desire for equity and the recognition that two people are not always equal (Berndt & Hoyle, 1995). Such recognition of inequality promotes sharing, concern, and other prosocial behaviours towards another person (Berndt & Hoyle, 1995).

Mutual responsiveness has also been studied in terms of prosocial behaviour. Children make references to helping another person, whilst adolescents will make more frequent references to the conditions in which friends help each other (Furman & Buhrmester, 1992). This reflects advancement in cognitive skills as well as the interesting finding that in early adolescence, prosocial behaviour between friends depends not only upon age but also upon situational influences (Furman & Buhrmester, 1992).

*Similarity.* A significant and observable feature of adolescent friendships is the similarity between friends. Throughout childhood and adolescence, friends may be similar in age, sex, and race (Degirmencioglu et al., 1998). This concordance is helpful in promoting intimacy, and during early adolescence, friends appear to be most similar on two characteristics; namely, orientation toward school and their orientation towards popular teenage culture (Berndt & Hoyle, 1995). This similarity may occur not only by adolescents selecting friends who have characteristics most similar to their own (Berndt & Keefe, 1995), but also through a process of mutual influence (Berndt & Keefe, 1995).

Research has indicated that adolescents project their own characteristics onto friends, resulting in their assumption that friend's behaviour matches their own, even when it does not (Wilcox & Udry, 1986). This facilitates SoB through a feeling of connectedness with others, and may also contribute to facilitating intimacy in friendships.

*Stability and Change.* A final feature of adolescent peer networks is stability and change. To date, most research suggests that early adolescent friendships are generally more stable than most in late childhood, often for periods of several months (Berndt & Hoyle, 1995; Carins et al., 1995). However most friendships are likely to fluctuate in strength over time (Carins et al., 1995). Stability is facilitated primarily by increased social skills, the ability to develop friendships with others who are similar to oneself and by enhanced cognitive skills (Degirmencioglu et al., 1998). Of particular importance in terms of cognitive skills is the development of the concept of loyalty that emerges in early adolescence and promotes more lasting friendships (Cairns et al., 1995).

Further, the characteristics of the networks themselves influence how stability is maintained. Group cohesiveness and size influence stability, with smaller, more dense networks exhibiting greater stability due to stronger linkages between members (Degirmencioglu et al., 1998). Although larger groups are less stable or cohesive than smaller ones, they have been observed to remain intact in the form of smaller network groups in cases where the larger friendship group disintegrates, demonstrating some stability for these network types (Degirmencioglu et al., 1998). In addition, reciprocal friendships are more likely to display stability than those friendships not mutually reciprocal between members (Urberg et al., 1995).

Change in adolescent social networks is induced by a myriad of factors including developmental and biological changes. However, observations that the peer social

networks of children in late primary school years exhibit greater stability than those of adolescents in early high school also indicates that network change is strongly influenced by the social environment and the normative changes that occur within it (Berndt & Hoyle, 1995). The transition to high school may be a period of significant instability in peer social networks as new friends are introduced into already existing networks, and for some adolescents, there is a need to form entirely new networks.

There are differences between network types in terms of how to negotiate such change in order to maintain stability. Groups with extensive connections between members are more likely to accept new members and adapt to change with greater ease than other network types (Degirmencioglu et al., 1998; Ryan, 2001). It has been found that when faced with change, female peer social networks are more likely to prefer to maintain existing networks rather than promote network change through inclusion of new members (Urberg et al., 1995).

*Summary and Future Research*

It is well established that during adolescence the focus of an individual's peer social network shifts from being primarily family based to being peer focused (Cairns et al., 1995; Levitt, Franco & Levitt, 1993). Adolescents come to rely heavily on peer social networks for the fulfilment of social needs (Pretty et al., 1996), as well as psychological needs such as intimacy, acceptance (Degirmencioglu et al., 1998) and SoB (Goodenow, 1993b; Hagborg, 1998). SoB has been found to be a particularly important factor in promoting adolescent well being, as well as buffering adolescents against more negative stressors (Goodnow, 1993b). Furthermore, it has been suggested that SoB at school, one of an adolescent's key social environments, has the benefit of promoting positive academic values (Anderman & Anderman, 1999) and making the school experience a

generally positive one. However, it has been observed that peer social networks are significantly disrupted by the transition to secondary school (Hurrelman, 1990; Ryan 2001), and this disruption may have the effect of diminishing an individual's SoB at school during this time.

An appreciation of the social networks of adolescents is often obtained through the use of multiple methods. Commonly used methods include the semi-structured interview and the process of requesting participants to list their friends (Berndt & Keefe, 1995). Both interviews and friendships lists used on their own, have been criticised by some researchers as compromising the accuracy of the data due to the subjective nature of the tasks (Degirmencioglu et al., 1998). Indeed, there appears to be no consensus on how friendship networks should be identified; some argue that friendship nominations cannot be viewed as correct unless they are reciprocated (Degirmencioglu et al., 1998) and that this is particularly so given the fact that individuals are often inaccurate in their appraisals of themselves (DuBois et al., 1992). Research has found that the positive effects of an individual's social support is derived not only from the support actually available, but also their perception of that support (Cauce, 1986). Therefore the subjective viewpoint is significant in determining the psychological value friendships hold for the individual.

The structure of social support systems are often analysed through sociological maps which visually plot members of a social network. They provide the opportunity to appreciate the complexity of interrelationships between its members (Cairns et al., 1995), as well as an opportunity to gain a more integrated insight into the individual's social network (Furman & Buhrmester, 1992). Sociological maps are analysed structurally in terms of their size and density, as well as interactionally looking at the types, quality and

content of the relationships between members of the network (Cauce, 1986). Research

indicates that close-knit, intense and reciprocal bonds are better sources of emotional

support (Cauce, 1986). In order to analyse both facets of sociological maps, it is most

helpful to engage the participant in the construction of a map as well as participation in

an accompanying interview.

Interviews are a valuable tool for understanding life from the participant's point of

view, adding a different perspective to research than that offered by quantitative methods.

As qualitative research often focuses on a small number of cases (Miles & Huberman,

1994), these approaches are beneficial in allowing a more comprehensive understanding

of the cases under investigation. Furthermore, there has been a call for qualitative

methods of inquiry to be used to investigate constructs such as SoB.

Quantitative research methods which, although yielding data that has been

important in contributing to what is currently known about SoB, do not fully investigate

the experience of belonging from the individual's perspective. The diversity of experience

which underlies a construct like SoB may be investigated more fully by using qualitative

methods (Hill, 1996), particularly when working with adolescents who report feeling

empowered by being given the opportunity to express their views (Prilleltensky, 2001).

Previous studies which have focused on adolescents' perceptions have found that

qualitative methods provide unique and valuable information about adolescents'

evaluations of their relationship experiences (Furman & Buhrmester, 1992). Therefore a

qualitative study may contribute additional information to what is currently known about

SoB, peer social networks and the school environment.

Research to date indicates that those adolescents with a high SoB may move

through the transition to secondary school more easily (Goodenow, 1993a). However, it

is not clear which aspects of peer social networks are most valued by adolescents in promoting a SoB in secondary school. In addition, further investigation is required on how adolescents who report a high of SoB perceive their networks. This information would provide an indication of what aspects or features of peer social networks are most valuable for developing or enhancing a SoB. Further, the transition to secondary school has been found to have a disruptive effect on adolescents' social networks (Degirmencioglu et al., 1998), and therefore an analysis of the social networks of adolescents who have only recently made this transition in order to complement this literature would be of interest.

*Aim and Research questions:*

In light of findings in the literature, the study presented here aims to explore the school based peer social networks of adolescents who have recently made the transition to secondary school. More specifically, this study is interested in examining the peer social networks of those adolescents who report a high SoB in order to determine, from their perspective the features of networks most valuable for promoting SoB in the school context. The research questions are as follows:

1) What is the structure of peer social networks at school for a cohort of year eight students with a high sense of belonging at school?

2) What is the function of peer social networks for a cohort of year eight students with a high sense of belonging at school?

3) What structures or functions are most salient for promoting sense of belonging after the transition to secondary school?

Method

This study explored the structure and function of social networks and their impact on SoB after the transition to secondary school, and was guided by Goodenow's research on psychological SoB (Goodenow, 1993a; Goodenow, 1993b).

*Participants*

The participants were eight adolescents currently at the end of their second term of year eight, the first year of secondary school. They attended a co-educational senior high school in the Joondalup Education District of Perth, Western Australia. There were five females and three males, aged between 12 and 13 years of age (M= 12.5).

The participants were recruited through their involvement in a larger study being conducted at the school in which they completed the PSSM scale (Goodenow, 1993a). Those participants with a high SoB at school as determined by the PSSM scale were invited to participate.

*Instruments*

The PSSM scale was used to identify those students who report a high sense of belonging at secondary school. This scale consists of 18 statements in which participants indicate their degree of agreement or disagreement on a likert scale. In order to avoid producing a response set by participants, one third of the statements are reversed (Goodenow, 1993a).

This study used a semi-structured interview schedule constructed by the researcher. There were 12 open-ended questions and included a number of probes used by the researcher to investigate further important themes as they emerged (Berg, 2001). The interview schedule was designed to evaluate different components of peer social

networks at school and their relationship to SoB. All interviews were tape recorded to ensure the reliability of data collection.

In addition, a sociological map was constructed, drawing upon ideas identified in the literature (Berndt & Keefe, 1995; Cairns et al., 1995). It was used to gain a visual representation of the structure and features of the participant's social network.

*Procedure*

Ten students who had the highest scores on the PSSM scale in the year eight sample were invited to participate in the study. Of those ten, eight were willing to participate and these students all scored above 65% on the scale. Participant scores ranged from 59 to 76 out of a possible score of 90.

Prior to conducting the interviews, a letter informing parents and or guardians of the purposes of the study was given to the participants to take home for consent to participate in the study (Appendix A). The letter included a permission slip for parents to sign that was given by the student to their Care Group Teacher. Once returned the names of those students whose parents consented for their children to participate were given to the school principal who arranged for these students to be released from their routine classes. The interviews were held in at a mutually acceptable time, and were conducted in an office at the school that provided a quiet and familiar environment for the participants.

A pilot interview was conducted on two participants. The pilot study confirmed the content and face validity of the schedule for adolescents aged 12 to 13 years.

On the day of the interviews, participants were informed of the purpose of the study, their right to withdraw from the study without penalty, and to not answer any questions that they did not wish to. Participants were also informed of the confidentiality of the information (Appendix B). Participants were given the opportunity to clarify any

issues regarding the study. Every participant was requested to sign a consent form (Appendix C) indicating their understanding of this information.

The researcher then presented each participant with a copy of the sociological map (Appendix D) and instructions on how to complete it (Appendix E). Once the participant completed the map, the researcher then proceeded to conduct the semi-structured interview (Appendix F). Each interview lasted approximately 15 minutes in duration.

During the interview, questions which yielded information that was identified to be particularly relevant to the relationship between peer social networks and SoB, were refined in order to elicit more information. This enabled a funnelling approach (Berg, 2001), whereby a broad theme is narrowed down to more specific details.

*Data Analysis*

The sociological map was visually analysed by examining where the participant located different friends in their social network at school in relation to themselves. Of particular research interest was the density of the social network, judged by proximity of each peer in relation to the participant on the map, and the stability of the network, determined by the time frames allocated to each friend. This process of analysis has been used in previous research (Cairns et al., 1995; Cauce, 1986). Further explanation of the map was provided by participants during the interview.

Recordings of the interviews were transcribed verbatim to ensure accuracy in reporting each participant's response. Each transcript was given a numerical code and therefore no names of participants are reported.

After transcription, thematic content analysis was used to analyse the data (Miles & Huberman, 1994). Thematic content analysis is a valuable method of assisting in identifying the most salient messages in verbal communication (Berg, 2001). The themes of most significant interest were those that related to factors previously reported to be associated with an adolescent's SoB (Goodenow, 1993a; Goodenow, 1993b; Urberg et al., 1995; Cairns et al., 1995), as well as those that were different from previous research findings.

After transcription, notes and reflections were made by the researcher on salient ideas that arose from re-reading the data (Miles & Huberman, 1994). Codes were then developed and identified in the transcript by locating words and emphasis on words used by the participant, as well as the references to individuals that the participant makes most frequently and the broader ideas they express (Berg, 2001). These were written onto the transcript as it was read. The codes were then grouped together into common or recurring themes (Berg, 2001). After theme analysis had been applied to all transcripts, they were compared and common themes were isolated (Berg, 2001). Furthermore, divergent themes were also of interest as they revealed additional information. The common and divergent themes were then considered in terms of the exploratory research being conducted (Berg, 2001).

Findings and Interpretations

This study aimed to explore the school based peer social networks of adolescents

identified as having a high SoB after the transition to secondary school, in order to

determine, from the adolescent's perspective, the features of their peer social network

which are most salient for facilitating SoB at school. A number of key themes were

generated from the sociological map and interview data. The study identified six key

themes, and several sub-themes that appear to be most closely associated with the

development of a SoB and peer social networks after the transition to secondary school.

These themes related to the structure and psychological function of peer social networks,

and additional themes outside of these categories also emerged. The themes are

summarised in Table 1.

Table 1

Features of Peer Social Networks that Promote Sense of Belonging

| Key Themes | Sub-themes |
| --- | --- |
| Network Structure | Density and Extensiveness |
| | Stability and Change |
| Social Safety | |
| Close Relationships | Intimacy and Trust |
| | Shared history |
| | Mutual responsiveness |
| Membership | Boundaries |
| | Labels |
| | Similarity |
| Subjective evaluation of SoB | School structure |
| | Contexts |
| Activities outside of school | |
| Individual Resourcefulness | |

Network Structure

Literature has indicated that peer social networks that are dense, have more

connections, exhibit stability and have reciprocal bonds between members are those

which facilitate sense of belonging and psychological well being to the greatest extent

(Cauce, 1986; Degirmencioglu et al., 1998). The network structure of participants in this

study reflected these findings in terms of network extensiveness, density and stability and

change. Reciprocity in friendship was not investigated in this study as this study focussed

on the adolescent's perceptions of their networks, rather than attempting to gain an objective understanding of these networks.

*Density and Extensiveness.* According to the sociological map, participants reported themselves to be located within dense networks. The average number of peers located in each map was 10, and network size ranged from 4 peers through to 15. It was found that females had larger networks with the average number of peers being 10, as opposed to 9 for males. For some participants network density was expressed in terms of locating themselves within very small networks, such as triad networks, with few or no connections outside of this triad group. Other participants reported being located within very extensive networks, in which they identified a sub-group of close friends with whom they had dense connections. It has been observed that adolescents are often situated within sub-groups such as this in which the closest friends are located (Degirmencioglu et al., 1998).

In terms of the participant who scored the highest on the PSSM scale, he reported his peer social network to be very small and dense, in which he was located within a triad friendship group. It did not have extensive connections and was almost exclusively dominated by new friendships. His desire to make new friends was motivated by his lack of social networks and belonging in primary school:

> *"I was looking forward to it [secondary school]. I hated primary school...I was a loner, I was teased heaps and I hated it."*

The transition to secondary school therefore provided this participant with an opportunity to create a new peer social network in which he was able to develop a best friendship, and in which there was a relatively high amount of reported intimacy in

comparison with other participants. This participant was very emphatic in his expression of belonging at school *"Yep. Definitely belong here. Yep"*.

In comparison to the highest scorer, the lowest scorer of the sample reported a very dispersed peer social network. This participant found it difficult to place friends on the sociological map and had difficulty verbally identifying close friends. It appeared that her social network was not very clearly defined, and this was a unique finding in the study. When speaking of her network, she stated:

> *"I have got some friends I hang around with in class like a group, and sometimes at lunch, but I have other friends and I kind of hang around them too so I kind of like share myself around!"*

The undefined nature of this participant's social network may be contributing to her lower score in relation to the other participants.

*Stability and change.* A key feature of adolescent peer social networks is network stability and change after the transition to secondary school. Given the disruptive effect the transition often has on social networks (Hurrelman, 1990; Urberg et al, 1995), it is not surprising that many participants reported marginally more change than stability in their networks. It was found that overall, 55% of participant's peers were friends they would consider to be new, that is those they have only known since coming to secondary school this year.

The effect that the introduction of new peers to existing social networks had varied. For some, the structure of peer networks changed. A couple of participants spoke about being pleased with the transition as it provided an opportunity for them to move from the dyad and triad based friendship networks they had been involved in during primary school, into small peer groups. This is illustrated by the quote:

*"I used to hang around two people or three, but now I hang around lots of*

*people"*

Furthermore, some participants found that they were able to make a best friend in

secondary school, and that the social relationships in secondary school were more stable:

*"In high school I have got a best friend, in primary school I had one every now*

*and again"*

This suggests that the transition provided these adolescents with an opportunity to create

a new social network or modify existing networks, and therefore enhance their sense of

belonging in the new school environment.

Some of the changes that resulted from the transition were more negative. One

participant reported a change in the level of reciprocity between herself and friends she

had in primary school:

*"The girls I used to hang around [in primary school], I'm not really friends with*

*them any more, like the girls around the outside [of the map], I know them and*

*they are the sort of friends I can go up and talk to them, but I don't think they like*

*me as much as I like them"*

However, the need to re-negotiate networks did encourage some adolescents to re-

evaluate their interactions with peers from primary school:

*"Last year I hardly even spoke to [name] and I don't think we had anything in*

*common. And then she started hanging around me and my friends this year...and*

*I guess I just realised that I do have a lot more in common with the people I hang*

*around now"*

It was also found that 45% of peers in the social networks were those participants

regarded as older friends, that is, friends they had known since primary school. This

substantial degree of stability is likely to have enhanced the ability of these adolescents to

navigate the changes occurring with the transition to secondary school more effectively.

Stability of social networks may enhance SoB via a reduction in the focus on building an

entirely new social network, therefore reducing initial social stress after the transition to

secondary school (Goodenow, 1993b). Further, stability of the social convoy enables a

consistent source of psychosocial support to be available to the individual, thereby

potentially enhancing individual sense of belonging (Levitt, Guacci-Franco & Levitt,

1993).

Psychological Functions of Peer Social Networks

Adolescent peer social networks have been found to serve a variety of

psychological functions (Asher & Kromrey, 1995; Berndt & Hoyle, 1995; Cauce, 1986),

and the participants in the present study also reported their social networks to be of great

importance for the meeting of psychosocial needs. Several themes emerged as being key

functions of peer social networks at school.

*Social Safety*

When reflecting upon their feelings earlier this year in anticipating the transition

to secondary school, participants reported a myriad of feelings, including being

*"worried"*, *"scared"*, *"nervous"*, and *"excited"*. The two key areas the participants

reported being most apprehensive about were making friends and academic achievement,

which participants reported managing by both cognitive and social means. A cognitive

method is reflected upon by one participant:

> *"I was worried that I wouldn't do very well or I wouldn't make friends. So I made*
>
> *it my New Year's resolution to make at least three friends. And I have done lots*

*more than that which I'm proud of. And yeah, it was just, I guess scary but*

*exciting"*

The most common social method was through the reliance on friendships with peers from

primary school who were also moving to the same secondary school:

*"By having people know you and stuff, like the way you are it's like easier than*

*people who don't know you"*

Participants mentioned that having friends from primary school was helpful in not only

easing personal apprehension about the impending transition, but also for providing a

type of social safety, that is the provision of a barrier against social judgement :

"Yeah by having people know you and stuff, like the way you are and everything,

its like easier than people who don't know you and they think 'oh my god who's

she?'"

*Close Friendships*

When reviewing the sociological maps, it is clear that for adolescents to have a

high sense of belonging, they must be able to locate themselves within peer social

networks that have close friendships. Participants differentiated between close friends

and other peers they located on their sociological map on the basis of three themes,

namely intimacy and trust, shared history and mutual responsiveness.

*Intimacy and trust.* When discussing friendships in adolescence, individuals

frequently refer to the value of friends for providing an avenue through which intimacy

may be shared (Berndt & Hoyle, 1995). The development of intimacy between

individuals is an important feature of close friendships throughout life, however during

adolescence this feature is particularly important by the role it plays in promoting

feelings of self worth and assisting in the alleviation of anxiety about the myriad of

physical and emotional changes that are occurring (Berndt & Keefe, 1995). Additionally,

friendships high in intimacy have positive effects on psychological adjustment and

coping with stress, especially in contexts that are transient, such as the transition to

secondary school (Berndt & Keefe, 1995).

The participants confirmed these research findings by reiterating the centrality of

intimacy for the development and maintenance of close friendships in secondary school,

and 'knowing' friends was an important basis upon which close friends were

distinguished from others, *"...I just know more about them than other people"*. In this

study participants differentiated between whom they felt emotionally safe to share

intimate thoughts and feelings. They reported that they were more likely to be intimate

with friends whom they consider to be close, who listen, and when they are feeling sad:

> *"Sometimes [I share personal information]...if I feel sad or something like*
>
> *that...they are the close friends"*

Adolescents also reported reciprocity in intimate disclosure to be of great importance for

facilitating emotional safety for the sharing of intimacy:

> *"She shares personal information with me as well which is good because we both*
>
> *trust each other"*

This quote also highlights that adolescents view trust as an important precursor for

intimacy. Statements such as, *"I can trust them"* were frequently made when discussing

close friends at school.

However contrary to findings in the literature which suggest intimacy to be

relatively high in early adolescence (Bigelow & LaGaipa, 1980, cited in Berndt, 1982),

the participants in this study were keen to convey that intimacy is not absolute, *"...some*

*things are too personal so I wouldn't tell "* and that in friendships where trust is lacking

intimate disclosure is hampered:

> *"I don't think so [sharing personal information]. Cause you never know what*
>
> *could happen"*

The limited terms upon which intimate disclosure takes place may be attributed to the

observation that whilst early adolescence generally witnesses an increase in intimacy, the

peak of intimacy in fact occurs later in adolescence (Berndt, 1982). It may also be

speculated that wariness could be due to the disruptive effect the transition to secondary

school has on social networks.

Whilst intimacy has been extensively discussed as a central feature of adolescent

friendships (Berndt & Hoyle, 1995; Berndt & Keefe, 1995), trust has been discussed to a

lesser extent. The notion of trust has been analysed further in sense of community

literature, under the idea of emotional security which enables individuals to feel

emotionally safe within their social groups (Pretty, Andrewes & Collette,1994).

*Shared history.* McMillan (1996) theorised that a sense of emotional connection

between members of a social group is achieved through both participating in and

reflecting upon involvement in a shared history. Participants reiterated this notion by

reporting that a sense of history with close friends in their peer social networks was vital

for their status as close friends, and frequent references to the length of time that

adolescents had been friends with their peers were made, such as *"...he is kind of my best*

*friend because he is my first friend to "*, and references to time periods, *"eight "* and

*"nine "* years which included the primary school years. Naturally, shared history was

related to knowledge of close friends, further reinforcing the value of a sense of history.

In line with the social convoy model (Levitt, Guacci-Franco & Levitt, 1993) shared

history may be of particular importance to these adolescents since they have only recently made the transition to secondary school, and so friendships with those peers from primary school may provide a sense of emotional and companionate stability in a changing social environment.

*Mutual responsiveness.* Mutual responsiveness, that is the responsiveness of friends to each other's needs (Urberg et al., 1995) has been found to increase in early adolescence, primarily due to cognitive development which facilitates the ability to view the world from another person's perspective (Santrock, 1994). Participants referred to mutual responsiveness in terms of prosocial behaviour, specifically helping each other, *"...with [name] I can always help her and she can always help me"*. Primarily participants referred to prosocial behaviour in the contexts of helping each other emotionally and academically:

> *"My friends are smart. Like [name] she is like a brain, she knows a lot and*
>
> *everything, and she helps me out if I'm stuck and everything"*

Whilst responding to each other's needs was mentioned as a key factor for promoting close friendships by participants, it was not highlighted as being as being as important as intimacy and shared history. This is a point on which the findings of this study differ considerably from previous research.

*Membership*

Peer social networks also serve to provide the individual with a sense of membership in a social setting; a feeling that they belong to a group. Membership may take of special significance in new social settings (Levitt, Guacci-Franco & Levitt, 1993). Participants defined their membership to peer social groups at school on the basis of boundaries, labels, stability and change.

*Boundaries*. Boundaries have been described as an important means by which social groups delineate "us" from "them" (McMillan, 1996). In this study, participants referred to boundaries at the class room level, differentiating between those peers who were in their class and those who were not. Participants frequently referred to the classroom being the centre from which most secondary school friendships were made, as one participant stated "*...you kind of stick with your class around here*". Therefore in this study, the boundaries placed on the participants by the larger social environment, in terms of classroom allocation, were the primary means of differentiating between those in an individual's peer social network, and those who were outside of this network.

Participants also alluded to boundaries being developed from within their friendship groups, particularly to conform to the thinking or beliefs of the group itself. As one participant stated, "*...sometimes you have to be not yourself. Sometimes you have to fit in*". The pressure for conformity is perhaps a more negative component of membership and belonging to a peer social group.

However, boundaries may be an avenue through which the individual is able to maintain stability in emotional connections and sources for emotional support in the changing social environment of secondary school (Levitt, Guacci-Franco & Levitt, 1993).

*Labels*. Further attempts to maintain a sense of membership were achieved through the allocation of labels between their own social group and others at school. Labels such as *"smart group"* and *"popular group"* were used. One participant used labels to indirectly describe her membership in her peer group, and in doing so also revealed an insight into where she believed her peer group was located socially within the school environment at large:

*"I have never been in the popular group, and I'm glad about that cause I think*

*being in that group would be hard"*

Furthermore, participants used labels to structure their observations about peer network

change since the transition to secondary school:

*"...all the kids that were really popular in primary school, now they have gone*

*down heaps. They're still popular kids though..."*

Therefore in this study labels assisted adolescents in more clearly identifying their

membership both within their peer social groups and within the wider school context. It is

interesting that the concept of labels has not been widely researched in the context of

SoB, although has been studied more thoroughly in sense of community literature

(McMillan & Chavis, 1986; Pretty et al., 1994). Further research on adolescent

application of labels to facilitate a sense of membership and belonging may be valuable.

*Similarity.* Adolescents most frequently report themselves to be located in peer

social networks with people whom they consider to be most similar to themselves. This

has been investigated in the literature mainly in terms of orientation to popular teenage

culture (Furman & Buhrmester, 1992). In terms of similarity on this point, responses

from participants varied. Some participants expressed a strong degree of similarity which

facilitated bonding within the friendship. However, other participants stated that they

were not similar to their friends on this concept, but that personality factors helped to

facilitate the development of their friendship:

*"We always find other stuff to talk about...The way we act I think [makes us*

*similar]. We all have kind of nutter sides. It is easy to bond with"*

Furthermore, participants also used gender as a means of building a sense of membership in the wider social group. The participants located themselves within their own gender group within the classroom through statements such as *"...all the other girls"*. Such similarity facilitated a sense of membership with peers and provides a basis upon which friendships may be built.

*Academic values.* Research on the features of adolescent friendships has revealed that adolescents are very similar to their peers in terms of commitment to academic motivation and achievement, and academic values (Anderman & Anderman, 1999; Arhar & Kromrey, 1995). Further, research on students who have high sense of belonging consistently demonstrates a positive correlation between sense of belonging and academic values.

All participants stated that they valued academic achievement and had strong motivation towards achieving their academic potential in high school. Participants stated that *"...it's important to me"* and stated that academic achievement promoted positive feelings about themselves *"I feel proud because my grades are high"*. Furthermore, participants cited the fulfilment of ambitions for life beyond secondary school as a motivating factor towards the attainment of these values:

> *"I want to do really well cause I know that I can. That might sound conceited or*
>
> *something, but I do know that I can. And I did pretty well at primary school*
>
> *because I shared dux"*

These positive academic values and the motivation to achieve them plays a role in facilitating sense of belonging for the adolescents in this study. The ability to achieve in the classroom and to be recognised as having achieved provide these adolescents with a sense of membership within the academic realm of school. Additionally, academic

success may assist in promoting sense of belonging in the classroom for those participants who felt sense of belonging to a lesser extent socially in this setting.

When asked about the similarity of their academic values to those of their friends, responses were mixed. Some participants stated that they did not know or were unsure of their friend's academic values, *"I don't know...we don't talk about it"*. For those participants who were aware of their friend's values, there was a clear differentiation between the similarity of close as compared to more peripheral friends in the peer network. Participants clearly st ited that the academic orientation of close friends most closely matched their own, *"...my close ones yeah"*. . It is possible that this similarity is as a result of a process of mutual influence whereby adolescents influence the thoughts and ideas of their friends and vice versa (Dubow & Tisak, 1989).

The responses reflect those found in the literature (Berndt & Keefe, 1995) and lend support to the notion that academic achievement is correlated with building a high sense of belonging after the transition to secondary school.

*Subjective Evaluation of Sense of Belonging*

The personal accounts of participants in this study confirms literature revealing that peer social networks are paramount for the development of sense of belonging at school (Goodenow, 1993a; Goodenow, 1993b). The participants spoke of sense of belonging in relation to the aspects of school and their peer social networks that make them feel a sense of belonging after the transition to secondary school, and the contexts in which they most strongly felt a sense of belonging at school.

*Aspects of school that promote sense of belonging.* Participants reported both friendships and academic achievement as being primary reasons for their self reported high sense of belonging in secondary school. Some reflections from participants include, *"...my friends and what grades I'm getting [facilitate sense of belonging]"* and *"Yes...I feel like I belong at school because of my friendships with other people"*. It is useful to remember that this cohort of participants reported considerable stability in close friendships since the transition to secondary school, and therefore it is possible that it is these close friendships with a sense of history that are most salient for promoting sense of belonging in year eight.

*Contexts.* Participants also differentiated between the various school contexts in which they felt a sense of belonging. For example, one participant expressed the opinion that her motivation for academic success alienated her from her peers in her classroom, that is the peers whom she has not yet established strong social links, however during free time at school she felt like she belonged as she was then interacting with friends with whom she considered close:

*"[I belong] at recess and lunch, yes. But not really in my class"*

In sense of belonging literature to date the construct of belonging has largely been discussed as a blanket term. That is, belonging has been discussed as either existing or not existing (Baker et al., 1997; Goodenow, 1993b; Schumacher, 1998). The participants in this study did not appear to view belonging in such unidimensional terms; they viewed belonging as being strongly contextual. This view also serves to highlight that in the secondary school setting in which the greater social environment is larger and has more participants, an adolescent may not feel a sense of belonging in all facets of the environment. It is probable that in primary schools where the social environment has

fewer participants, individual sense of belonging may apply to more aspects of the school environment.

<u>Other Factors that Promote a Sense of Belonging</u>

In addition to the structure and function of peer social networks, there are also other factors about their friendship networks that participants report to promote sense of belonging at school.

*Structure of the school.* Participants reported peer network change to be partly induced by the structure of secondary school education. Whilst primary school classes in Australia tend to be smaller and students remain in the same class for all subjects, secondary school classes are larger and require students to move into different classes for each subject. This move between classes was reported to be a significant obstacle to the maintenance of existing friendships, and in some cases was cited as being the primary reason why friendships from primary school were not maintained:

> *"I don't hang around with my friends [from primary school] any more. They sit somewhere else. I talk to them and all that...it's harder because they're not in my class. Even though [name] is not in my class either, she is willing to meet me somewhere...but some of my other friends don't want to do that. It is just easy for them to hang around people in their class"*

However, there were some participants who reported that different classes was not an obstacle to maintaining existing friendships as *"we see each other at lunch and recess, during breaks and in the mornings, and after school as well"*. The data suggests that friendships which were weaker during primary school will not survive the transition, however close friendships will.

It is possible that the problems some participants discussed in terms of changing classes may reflect the 'settling in' stage that participants may be in as the study was conducted at the end of second term. It is likely that participants were still determining how to establish and maintain friendships within a new school environment.

In addition, the structure of the new secondary school was reported to be detrimental to the development of new networks that incorporate others in the year group:

*"[In primary school] I was in the same class for two years so everyone would know what I would do. They would know if I got upset or something. And like everyone was sort of friends with everyone...everyone kind of knew me and now they don't really know me and I don't think they want to get to know me"*

This finding lends weight to arguments that traditional school structures do not facilitate the development of peer networks, and therefore impede the development of individual sense of belonging (Baker et al., 1997; Battistich et al., 1997). It may be hypothesised that a relational approach to schooling in which the social environment in which learning takes place is recognised and fostered (Battistich et al., 1997), may aid in resolving issues such as the one highlighted by this participant.

*Activities outside of school.* Considering the significant amount of time that adolescents spend at school (Battistich et al, 1997) it is not unusual that activities with peers from school after school hours also emerged as a theme that bolstered individual sense of belonging. Participants felt that having the opportunity to interact with their peers from school was important for the development of closer friendships, *"...and seeing each other outside of school, I think that helps to like make us closer".*

*Individual Resourcefulness.* This study revealed that those adolescents with a high sense of belonging were also socially and emotionally resourceful. These adolescents

were able to recognise the boundaries of their friendships, *"...my friends help me most of the time. Sometimes I cant really get support, but that's ok"*, and were willing to work around these boundaries, *"...and also if I'm feeling down and I don't want to talk to my friends I will just go to the school psych[ologist]"*

This resourcefulness and the ability to recognise, accept and work around limitations of friendships has not emerged strongly in research to date on the interaction between adolescents and their friends. This point is outside the parameters of this investigation, however further studies on this point may well yield interesting findings.

*Summary*

This study found that peer social networks act to enhance sense of belonging through two avenues, namely their structure and their psychological function. Structurally, the findings indicate that peer networks which are dense and exhibit a considerable degree of stability in the transition to secondary school are those which are most beneficial for providing sense of belonging. These findings are found in previous research (Cairns et al.,1995; Degirmencioglu et al., 1998; Urberg et al.,1995).

In terms of psychological function, the study found that school based peer network structures provide numerous benefits to adolescents, including the provision of close friendships to enable the exchange of intimacy, and a feeling of membership to a social group through the identification with peers who are similar to oneself. The study also found that peer networks serve additional functions that positively correlate with sense of belonging, including the structure of the secondary school, interactions with peers outside of school, and individual resourcefulness.

Discussion

This study explored the school based peer social networks of adolescents

identified as having a high SoB after the transition to secondary school, in order to

determine the features of their peer social network which are most salient for facilitating

SoB at school. Adopting a qualitative approach to data collection enabled the research to

reveal data that is reflective of adolescents' perspectives on this issue.

The findings of this study contribute to the research already available on the

association between adolescent peer social networks and a high SoB. More specifically,

the findings serve to provide greater insight into the features of peer social networks that

have been most important, from the perspective of adolescents, for facilitating SoB after

the transition to secondary school.

The accounts provided by the adolescents in this study confirm results of previous

research which state that the most positive adolescent peer social networks in terms of

promoting SoB are those that are smaller, have more dense connections between

members and are relatively stable across time (Cauce, 1986; Degirmencioglu et al., 1998;

Urberg et al., 1995). Whilst there was inevitably varying degrees of change in peer social

networks with the transition to secondary school, the accounts provided here indicate that

the maintenance of a stable group of core friends is particularly valuable in assisting

adolescents in navigating the numerous stressors and changing dynamics associated with

this transition (Schumacher, 1998).

The results of previous research on the features of adolescent friendships has also

been supported by this study (Cauce, 1986; Berndt & Keefe, 1995; Degirmencioglu et al.,

1998). The accounts of the adolescents emphasised the importance of being able to

identify at least one close friend in their school peer social network with whom they felt a

sense of shared history, intimacy, and trust. Indeed, these results suggest that for this group of adolescents, such close friends were a key factor in assisting them in settling into secondary school. Furthermore, it can be seen that having valued peers with whom the adolescent is able to make the transition to high school, provides the stability necessary to concentrate on other aspects of the transition, such as attention to academic work (Goodenow, 1993b).

The most important finding generated by this study is that whilst positive peer social networks are those that provide the psychosocial benefits already discussed, the structure of these networks may vary. The participants in this study were not solely from large yet densely connected social groups as found in previous research (Degirmencioglu et al., 1998; Urberg et al., 1995); they were situated in triad, small groups, and extensive networks. This demonstrates that there is no 'best' network structure for promoting SoB in adolescents at school, but rather the psychosocial benefits that these networks provide adolescents is what is most valuable for promoting SoB.

These results contribute to Australian research on SoB in secondary school. Most research to date on adolescent SoB in secondary school has been conducted in the United States, where students move from elementary school to junior high school, and therefore adolescents are at slightly different ages when this transition occurs. Therefore, the findings of this study may be more relevant for the Australian school context than previous studies.

The results of this study may be of particular interest to educators as they lend support to preliminary research suggesting that traditional school structures are not necessarily successful in promoting individual SoB. The differentiation that some adolescents made between SoB during class time and SoB during free time with their

friends at school suggests that adolescents may benefit from a relational approach to education in order to bolster SoB in the classroom (Baker, Terry, Bridger, & Winsor, 1997). This may also have the added effect of improving academic performance (Beck & Malley, 1998), although this is yet to be comprehensively researched.

It is acknowledged that there were several limitations of this study. Whilst the participant sample was comprised of a relatively balanced number of males and females, much of the information came from the female participants. This is because the females were more willing to discuss their peer social networks and feelings associated with the transition to secondary school than were the males. Other limitations of this study include that it was conducted at only one community high school, and it would have been valuable to explore experiences of adolescents at various high schools. Additionally, this study focused on a homogenous sample, and whilst it was the intention of this study to do so, future research may wish to also examine the SoB of those adolescents at the secondary school who were assessed as scoring lower on SoB, as this too may have yielded information that indicates what facets of peer social networks are most salient for promoting SoB at school.

Future research may also investigate peer social network change during the transition to secondary school more longitudinally by examining adolescents in their final year of primary school and again during their first year of secondary school, in order to examine how SoB fluctuates over the course of this transition and the mediating role peer social networks play in this.

Despite these limitations, the study nevertheless yielded findings that contribute to the literature on the relationship between high SoB and peer social networks at school. It further provided an interesting insight into the importance that close friendships have in

assisting adolescents to make the transition to high school with relative ease. It confirms that supportive and strong friendships are imperative for enabling an adolescent to feel valued, accepted and supported during this particularly unstable stage of their educational lives, and serve to provide a SoB that results in psychological well being in secondary school.

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Appendix A
Letter to Participants' Parents

Dear Parent/Guardian

We are conducting a study in partnership with your child's school and the Edith Cowan University. We are writing to all parents of your child's year group, seeking permission for your children to participate in the study. The study is focusing on adolescents and their transition to high school.

The outcomes of this research should provide us with a better understanding of the individual and environmental factors that impact on early adolescence. This information is important to Clarkson Community High School in planning future programs and we would greatly appreciate it if you would allow your child to participate.

If you agree to let your child participate, they will be asked to complete four short questionnaires in class time, Thursday 27th June. In addition your child may be asked to participate in a brief interview to find out more about their experiences at school. These interviews will be tape recorded and later transcribed.

We wish to assure you that the information provided by your child will be treated in the strictest confidence. All identifying information will be removed from the data reported.

If you agree to your child participating in the study, please complete the following section and return it to your child's Care Group Teacher by Friday 21st June.

Should you have any queries please contact Dr Lynne Cohen (9400 5575) or Ms Julie Anne Pooley (9400 5591), School of Psychology, Edith Cowan University.

**Please return to Care Group teacher by (insert date)**

Yours sincerely


Angela Verevis
Associate Principal
Clarkson Community High School
.......July 2002

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I................................give consent for ...................................
(Name of parent/guardian)                              (Child's Name)

of......................................................................to participate in the study.
                              (Care Group)

..............................................          ....................
(Signature of parent/guardian)                    (Date)

## Appendix B
### Verbal Explanation on the Purpose of the Study

You did really well in these surveys, and for this reason I would like to talk to you a little today. I would like to talk to you about how you have found coming to high school this year. In particular, I would like to ask you a few questions about your friends and school and how they have helped you this year.

My questions should take approximately 15-30 minutes. There are no right or wrong answers. I am interested in hearing about how you feel and what you think. No one will know what you tell me here- it is between you and me. I have to tape record this interview so that I can concentrate on what you are saying rather than try and take notes. After the interview is over, I will transcribe what you have said and destroy the tape. Your name will not be on the transcript.

You don't have to talk to me today. You can stop talking to me whenever you want. If you don't feel comfortable answering any of the questions, you can tell me to pass and we will go onto the next question.

Are you happy to continue?

## Appendix C
## Participant Consent Form

Experiences of School Life Project

I, _____, consent to participate in this
interview. I understand that:

1. The interview is investigating how my friends at school have contributed to my adjustment to high school
2. My participation in this interview is voluntary, and that I may choose to withdraw from the interview at any time, with no adverse consequences
3. The interview will be audiotaped, transcribed and my name will not be identified
4. Completion of the interview will take approximately 30 minutes
5. All of this information has been explained to my satisfaction

Signed_____

Date:_____

Appendix D
Sociological Map

Not so Close, Not so Important

Close but not as Important

Closest & Most Important

ME
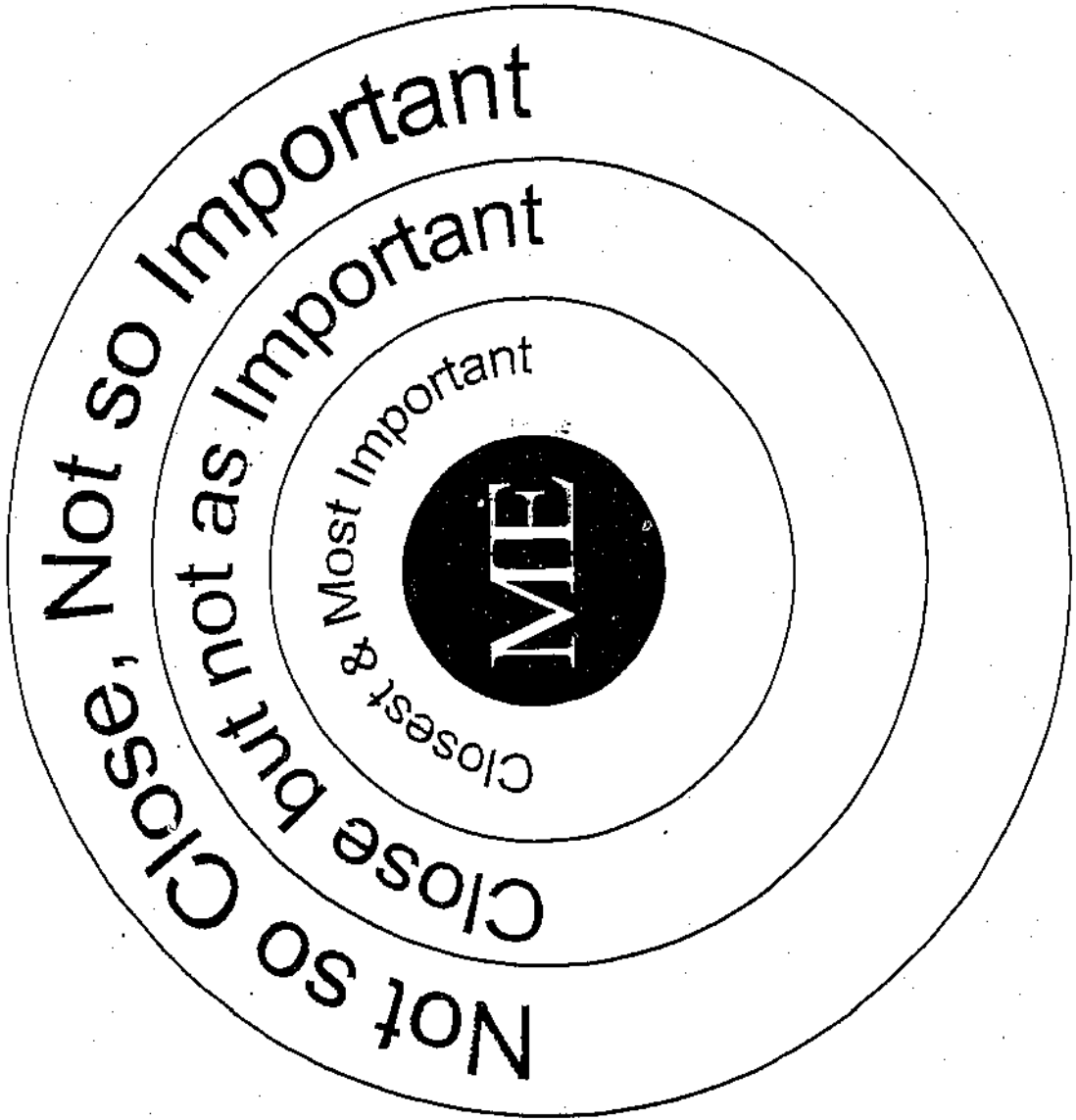
Appendix E
Instructions on how to complete the sociological map

This is a friendship map. The black circle with "me" written on it, is you, and what I would like you to do is to write the names of your friends at school in the circles. Friends who you would consider to be your closest friends may go in the first circle (closest and most important), whereas friends who you would consider to be not so close may go in the outer circle (not so close, not so important). When you write your friend's names, write only their first name.

I would also like you to write next to each friend if they are an old friend or a new friend. An 'old' friend is one you have known before coming to high school this year, like those from primary school. A 'new' friend is one you have only known at school this year.

Remember, only list those friends you have at school.

There are no right or wrong ways to complete the map; I am interested in what you think. You can take as long as you like.

Do you have any questions?

Appendix F
Semi-Structured Interview Schedule

I would like to talk to you a little about your network map...

1.     Can you describe for me the friends you have at school, for example do you hang around with a group of friends?

       - Where are they on the map?

2.     Would you say there are some people in your group who you would consider close friends or best friends?

       - What makes these people closer friends than other people in the group?

3.     Since coming to high school, has your group of friends changed?

*If new people have joined the group:*
Have new people joined your group this year?
       - Where are they on the map?

       - How did you feel about that?

       - Do you think these new people changed the group in any way?

*If student has joined a new group:*
Where are your new group of friends on the map?

       - How did you feel about joining a new group?

4.     How do you feel about doing well at high school?

5.     Do your friends feel the same way about school as you do?

6.     Do you like the same things as your friends, for example, the same music or tv shows?

7.     If you were in trouble, are there any friends at school who would help you?

       - Where are they on the map?

8.     If you feel sad do you have friends at school you can talk to?

       - Where are they on the map?

9.    Are there friends at school who you would share personal information with?

      - Where are they on the map?

10.   Would you say that your friends know you really well or just a little?

If "yes"
      What makes you know your friends really well?
If "no"
      Why do you think they don't know you any better?

11.   Do you feel like you belong at school?

-    What makes you feel like you belong / don't belong?

12.   When you were in primary school last year, do you remember how you felt about coming to high school?