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TRANSITION TO MARRIAGE: A LITERATURE REVIEW

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The effective design and successful implementation of programs that target the transition to marriage has been limited in the family life education field. Some researchers have called for more of a family life education focus on newlyweds. In order to expand our understanding of this important transition, a review of the existing literature on the transition to marriage would be a significant contribution to family life researchers and educators. The present article synthesizes the available information that is germane to our understanding of the transition to marriage by highlighting the salient intrapersonal, interpersonal, familial, and social developmental issues facing couples making the marital transition in order to conduct future research and design relevant family life education curricula.

Surprisingly, there is limited data on a couples' first year of marriage, couples' preparation and readiness for marriage (Holman & Li, 1997; Larson & Holman, 1994), and how couples' relationships change as they progress through courtship and into marriage (Huston, McHale, & Crouter, 1986; Huston, Surra, Fitzgerald, & Cate, 1981). Thus, the design and successful implementation of programs that target newlywed couples have been lacking in the family life education field, although some researchers have called for more of a family life education focus on newlyweds (Mace, 1982).

In order to expand our understanding of this important transition, a review of the existing literature on the transition to marriage is a significant contribution to family life researchers and educators. Therefore, the present paper synthesizes the available information that is germane to our understanding of the transition to marriage. An additional goal is to highlight for family life educators some of the salient intrapersonal, interpersonal, familial, and social developmental issues facing couples making the marital transition in order to conduct future research and design relevant family life education curricula. Cate and Lloyd (1988) have indicated that courtships vary in their progression to marriage due to these developmental issues.

The Transition to Marriage: A Developmental Task

There is a burgeoning body of literature discussing families in relation to their developmental phase, and in referring to marriage in developmental terms (Carter & McGoldrick, 1989). The family life cycle perspective addresses the nodal events related to the ongoing structural entrances and exits of family members using a framework of developmental transitional periods (Carter & McGoldrick; Duvall, 1971; Hill & Rodgers, 1964). A transition is defined as the passage from one ending state to another beginning state (Bridges, 1980). Although many family life cycle transitions like the onset to marriage, parenting, and retirement are normative and anticipated, previous researchers have suggested that the individual and the

family system can still experience a great amount of stress and difficulty in managing these transitions (Carter & McGoldrick; Hadley, Jacob, Milliones, Caplan, & Spitz, 1974).

Marriage qualifies as a life cycle transition that is both normative and anticipated, and yet, has the potential to be highly stressful (Boss, 1988). According to McGoldrick (1989), becoming a couple is one of the most complex and difficult transitions of the family life cycle even though it is often perceived as the least complicated and most joyous. This romanticized view of the transition to marriage may contribute to a couple's lack of adequate preparation and subsequent difficulty and distress during the transition. Many people consider marriage as the unimpeded, blissful joining of two individuals. However, Carter and McGoldrick (1989) have suggested that marriage really represents the merger of two entire systems combining together in developing a new, third family system.

Intrapersonal Developmental Issues

Intrapersonal issues like personality characteristics, attitudes, beliefs, values, marital expectations, and degree of idealization significantly effect an individual's and subsequently a couple's transition to marriage.

Personality Characteristics. Personality researchers and theorists have indicated that the development course of an individual's personality may have genetic origins and predispose an individual's personality to remain the same or deteriorate over the life span (Reiss, 1995). Costa and McCrae (1988) have reported that data of many longitudinal studies has indicated that "aging itself has little effect on personality" (p. 862). Regardless of personality etiology, numerous studies have found that the absence and/or presence of positive/negative personality characteristics affected the stability and satisfaction outcomes of marriage (Vargha, 1992-1993). Marriage to a similar other promotes consistency in the intraindividual organization of personality attributes across middle adulthood (Caspi & Herbener, 1990).

Botwin, Buss, and Shackelford (1997) and Holman and Li (1997) reported that newlyweds' personalities do play an important role in the courtship/mating process with marriage partners selecting mates with similar personality characteristics to their own ideals. Similarity allows for more familiar patterns of communication, empathy, and understanding (Antill, 1983; Buss, 1984; Kurdek & Smith, 1987; Lesnick-Oberstein & Cohen, 1984). Cate and Lloyd (1992) found that individuals who were psychologically healthy (i.e., emotionally stable) were more likely to be maritally satisfied than those individuals who were psychologically unhealthy. Kurdek (1991) stated that discrepancies in reported personality scores of newlyweds influenced their reported levels of marital quality. Holden (1991) indicated that personality priorities that were almost exclusively complimentary (i.e., opposite) rather than symmetrical (i.e., similar) related to the subsequent pursuit of marital therapy of couples.

Kim, Martin, and Martin (1989) and Levine and Henessy (1990) found that personality factors differentiated stable from unstable marriages. Stable marriages were more similar in intelligence, protension, radicalism, tender-mindedness, mutual trust, acceptance, enthusiasm, and genuineness. Personality factors that reduce the likelihood of stability and satisfaction have included the lack of warmth and extraversion (Levine & Henessy); passive-aggression (Slavik, Carlson, & Sperry, 1998); borderline pathologies (Paris & Braverman, 1995); bipolar disorders (Peven & Schulman, 1998); feelings of insecurity, unfairness, depreciation, and powerlessness (Begin, Sabourin, Lussier, & Wright, 1997); disagreeableness, emotional instability, inconsiderateness, and physical abuse (Botwin et al., 1997; Kosek, 1996; Shackelford & Buss, 1997; Vargha, 1992-1993); chemical abuse (Leonard & Jacob, 1988); depression (Cohan &

Bradbury, 1997; Davila & Bradbury, 1997; Fals-Stewart, Birchler, Schafer, & Lucente, 1994; Katz, Beach, Smith, & Myers, 1997); neuroticism (Karney & Bradbury, 1997; Russell & Wells, 1994a; Russell & Wells, 1994b); tension, anxiety, worry, and suspicion (Craig & Olson, 1995); hostility, defensiveness, and aggression (Heyman, O'Leary, & Jouriles, 1995; O'Leary, Malone, & Tyree, 1994; Newton, Kiecolt-Glaser, Glaser, & Malarkey, 1995); and negative affectivity leading to negative attributions (Huston & Vangelistic, 1991; Karney, Bradbury, Fincham, & O'Sullivan, 1994).

Attitudes, Beliefs, Values, and Expectations. Differences in personal attitudes, values, and beliefs can cause stress in the new family system (Carter & McGoldrick, 1989), particularly if the couple does not possess the resources to manage differences. While forming a new family subsystem, couples may experience differences in needs and values over issues like: family leadership, gender, loyalty, money, power, sex, privacy, and children (Betcher & Macauley, 1990; Fitzpatrick, 1988; Holman & Li, 1997; Kalmykova, 1983). In addition, Storaasli and Markman (1990), indicated that problems related to communication, sex, and leisure activities show significant increases in intensity in the period between premarriage and parenting. Wamboldt and Reiss (1989) indicated that couple identity was best achieved in a shared couple paradigm with consensus and agreement on the valued aspects of the relationship. Johnson and Booth (1998) found that marital quality was due largely to the dyadic perceptions of the relationship processes rather than the perceptions of personality stability.

National polls show that what people consider to be very important in marriage (i.e., love, sexual fidelity, and the ability to talk about feelings) has been fairly similar over the past two decades (Roper Organization, 1990). Larson (1988a; 1992) and Larson and Holman (1994) suggested that a person's beliefs about marriage and how marital satisfaction was achieved might significantly affect one's expectations and readiness for marriage. Karney et al. (1994) found that negative spousal affectivity contributed to the negative attributions one makes about self, spouse, and marital relationship.

Expectations for marriage are often in sharp contrast to the realities of what it takes to create a satisfying marriage. Where do these expectations come from? The formation of marital role expectations and attitudes about marriage begins in childhood and develops throughout a person's life. Sager (1986) explained that expectations are rooted in our family patterns with the yearning to create or recreate the love, closeness, and nurturance that may or may not have been experienced with original caretaker(s). Additionally, McGoldrick (1989) and Marlar and Jacobs (1992) stated that family myths and attitudes about marriage were passed down to successive generations consequently making the transition to marriage proportionately smoother or more difficult for couples in succeeding generations.

The socialization processes of childhood shape and formulate gender-related attitudes and beliefs that, in turn, create marital behavior patterns that may contain a variety of traditional and/or non-traditional elements (Duck, 1993; Huston & Geis, 1993; Otto, 1979; Stinnett, 1969; Thoits, 1992). Social mores perpetuate the traditionalist myth that in marriage men should be in a superior, hierarchical position (e.g., older, more educated, more sexually dominant, more income-generating power) (Carter & McGoldrick, 1989; Schwartz, 1994). The cultural ideal for the wife of the 1990s includes maintaining a second shift by caring for the husband, children, and house, while also earning an outside income and never asking for more for herself (Hochschild, 1989). Bielby and Bielby (1989) stated that women were more concerned with family and marital roles than with their work or occupational roles, whereas men placed greater importance on work roles than on family and marriage roles. However, traditional assumptions about

marital and social responsibilities often do not reflect marital and social reality thereby creating disagreements over the establishment of spousal roles within the marriage (Bader & Sinclair, 1983; Huston & Geis; Schwartz).

Ganong, Coleman, and Brown (1981) and Salts, Seismore, Lindholm, and Smith (1994) asserted that females held more favorable attitudes toward marriage and were more egalitarian in their marital role expectations than were males. Carter and McGoldrick (1989) suggested that although women tend to anticipate marriage with enthusiasm, epidemiological data have revealed it has not been the most advantageous state for them. Craddock (1983) and Schwartz (1994) reported that couples who shared congruent attitudes and egalitarian expectations of marriage reported significantly higher levels of marriage satisfaction in the areas of personality issues, communication, conflict resolution, leisure activities, spousal role consensus, personal habit tolerance, and family and friends. Obviously, how gender roles are translated into spousal roles is a complex and pervasive process for contemporary couples.

Many couples may have experienced premarital relationships that were often filled with utopian fantasies and myths that their marriage and marriage partner would be perfect (Crosby, 1985). Couples soon realize that they must reconcile their dreams and illusions of marriage or the ideal relationship with the reality that there is no perfect match, which often leads to disappointment and frustration or what has been termed postmarital disillusionment (Arond & Pauker, 1987). According to Larson (1988a), gender and individual level of romanticism affected beliefs about marriage. Larson's research indicated that women believed in myths to a lesser degree than men, and those with romantic attitudes and views believed in myths more than those who were less romantic.

Interpersonal Developmental Issues

Interpersonal developmental issues such as (a) the relational issues of love, intimacy, commitment, affection, sexuality, and communication patterns and skills (i.e., handling anger and managing conflict, decision-making and power); (b) the familial issues of familial interactions, boundary-making, differentiation, triangulation, fusion, family constellation, and parental and sibling approval of spouse/marriage; and (c) the social issues of social integration and work and family demands can significantly impact a couple's transition to marriage.

Relational Issues: Love, Intimacy, and Commitment. One important expectation of the contemporary companionate marriage model is that married partners will meet each others' need for love, intimacy, and affection. Kelley and Burgoon (1991) reported that failure to fulfill one's partner's expectations about the intimacy in the relationship predicts marital dissatisfaction. Some individuals have a higher need for emotional intimacy than others and, therefore, must discuss and come to an understanding of the degree of intimacy and the expression or language of love and affection used by their partner in their relationship (Tannen, 1990). According to Gottman (1995) and Holman and Li (1997), romance was the most important ingredient in the newlywed relationship and was kept alive by frequent interactions, spending time together, and openly disclosing one's thoughts and feelings. Individuals who admire, support, and are proud of each other in their respective endeavors and achievements openly express appreciation and build one another's self-esteem and fulfill emotional needs build a satisfying and enduring relationship (Bell, Daly, & Gonzalez, 1987).

An individual's ability to successfully commit to a marriage and a partner requires a well-developed identity, high self-esteem, empathy, and an assumption of permanence. According to Mace (1982), a successful marriage requires three things: (a) a high degree of motivation, (b) a

desire to make the marriage work, and (c) a willingness to expend personal time and effort to make sure it does. Sabatelli and Cecil-Pigo (1985) found that when both partners were participating equally in the relationship and when there was maximum interdependence, the couple was the most committed. Therefore, it seems that marital success is attainable if the commitment is mutual (Surra, Arizzi, & Asmussen, 1988).

Commitment is essential to the process of developing a marital relationship that endures (Mace, 1989). Commitments need to be made to the partner, to a belief in the importance of the institution of marriage, as well as to the willingness to invest in having a mutually gratifying marriage (Huston et al., 1981; Surra, 1987; Surra et al., 1988).

Relational Issues: Affection, Sexuality and Cohabitation. Bell et al. (1987) stressed the importance of physical and verbal affection in a couple relationship. In addition, the couple should dialogue and work out their differences concerning the frequency and variety of affection and sexual activity (Ammons & Stinnett, 1980; Crosby, 1985). Recent research indiciates that couples may enter marriage with much more sexual experience than the typical newlyweds of the past. Given the rates of nonmarital sexual intercourse among adolescents (Mott & Havrin, 1988), it is not surprising that researchers have suggested that the majority of newlyweds have had sexual relations together before marrying. Arond and Pauker (1987) found in their study that a majority of the couples reported enjoying a sexually healthy relationship prior to marriage, but 25% of couples reported sexual dysfunctions were an issue for them within the first year of marriage. Also, James (1981) reported a substantial decline in coital rates during the first year of marriage, especially for couples who had no premarital intercourse. In addition, premarital pregnancy often precipitates early marriages and can lead to greatly increased stress, marital instability (Teti & Lamb, 1989), or even lower marital quality (Kurdek, 1991).

Cohabitation makes the transition to marriage much less of a clearly delineated turning point in the couple's life than in the past (McGoldrick, 1989). Twenty-five percent of the men and women who marry for the first time are cohabitating at the time of their marriage and 40% of couples who remarry cohabit prior to marriage (Ganong & Coleman, 1994; Glenn, 1991). According to Newcomb (1987), several possible effects of cohabitation upon a subsequent marriage have been proposed and examined (e.g., significantly lower measures of marital quality, Booth & Johnson, 1988; Thomson & Colella, 1992; significantly higher risk of marital dissolution, Balakrishnan, Rao, Lapierre-Adamcyk, & Krotki, 1987; Bennett, Blanc, & Bloom, 1988; Bumpass & Sweet, 1989; Gurak, Falcon, Sandefur, & Torrecilha, 1989; Teachman & Polonoko, 1990). DeMaris and MacDonald (1993) indicated the longer couples have lived together before marriage, the earlier disillusionment develops in the marital relationship.

However, there is some evidence that cohabitation may help couples prepare for marriage (Glenn, 1991). Cohabitation has been used as a screening device to test compatibility (Newcomb, 1987) and allowed for negotiation of relationship functions prior to marriage (DeMaris & Leslie, 1984). Cohabitation, much like engagement, prepared a couple for the realities of marriage and helped them think in terms of the couple as well as individuals. Consequently, Surra (1990) cited evidence that suggested that different cohabitation studies (e.g., Macklin, 1983; Booth & Johnson, 1988; Bumpass & Sweet, 1988) yielded different and sometimes contradictory results. Thus, the conclusion seems to be that the evidence thus far is unclear as to whether cohabitation contributes to an ultimately happy marriage.

Relational Issues: Communication Patterns. Relatively open and effective communication is essential for human growth and development. It also serves as the essential foundation for marital success and is the facilitating process for an enduring marriage that is

satisfying (Robinson & Blanton, 1993). Gottman (1995) indicated that communication could be productive or destructive to relationships as unhappy couples tend to criticize, disagree, complain, put down, and use excuses and sarcasm. Unrewarding communication patterns precede the development of relationship distress (Markman, 1979). In contrast, happy couples with marital stability and satisfaction were more likely to use active listening skills, agree, approve, assent, use laughter and humor (Fisher, Giblin, & Hoopes, 1982; Noller & Fitzpatrick, 1991), and possess character virtues of self-restraint, courage, and friendship (Fowers, 1998). Gottman (1995) has suggested that satisfied couples maintain a five-to-one ratio of positive to negative exchanges in interactions.

Gender also plays an important role in couple communication as there are gender differences in verbal and nonverbal communication with men tending to be more dominant in their interactions and women being more submissive (Tannen, 1990). O'Donohue and Crouch (1996) indicated individuals tend to hold stereotypes of gender differences that have not been supported in empirical investigations. However, they did indicate that gender does influence the amount of elicited conversation, utterance length, use of qualifying phrases, swearing and compliment style. Because men and women have been socialized to perceive the world differently, good couple communication is a challenge in any relationship. Tannen noted the importance of men and women recognizing and understanding the impact of "genderlect" on marital communication. Therefore, when couples fail to effectively communicate, poorly managed conflict is inevitable (Roberts & Krokoff, 1990).

Relational Issues: Anger, Conflict, Decision-making, and Power. Gottman (1995) indicated that marital anger and conflict were endemic forces and a challenge to be met rather than avoided as is often the case in the early years of marriage. Laughrea, Belanger, Wright, and McDuff (1997) stated that the anger intensity quotient among both spouses was closely linked. The inability to manage anger and conflict effectively leads to negative exchanges that can put a couple's marriage on a downward spiral (Bray, 1995; Gottman, 1995). Newton et al. (1995) found that newlywed husbands and wives experienced greater percentages of conflict and withdrawal when hostility and defensive personality characteristics existed within the marriage. Shackelford and Buss (1997) indicated that spousal esteem and disparagement negatively covaried with the frequency of conflict in the areas of jealousy, affection, and money. In fact, research on marital communication has found that unhappily married couples were distinguished by their failure to productively manage conflict and initiate communication repair activities (Gottman, 1995; Mace, 1989). Mace (1989), Murstein (1986), and Olson et al. (1989) suggested good conflict-resolution skills and communication skills were necessary in order for couples to be better able to cope with the stresses involved in the transition to marriage.

Heyman et al. (1995), Kelly, Huston, and Cate (1985), and O'Leary et al. (1994) found that premarital conflict and spousal physical aggression were precursors of marital conflict and violence which predicted the extent to which a couple was satisfied once they have been married for a few years. Arond and Pauker (1987) stated that newlyweds who fought less frequently and more productively rated themselves as happier in their marriages than those couples who fought more often. Houts, Robins, and Huston (1996) indicated that turbulent relationships were characterized by less well-matched partners, had more openly expressed negativity and greater relational ambivalence. In general, couples who were less well-matched and in relational distress were less accurate in their descriptions of each other and were less inclined to engage in behavior designed to enhance their relationship (Szarota, 1992).

Anger and conflict are the fuel of many power struggles (Dreikurs, 1953; Gottman, 1995). A couple's power ideology is established and negotiated in the early stages of relationship formation and is usually a reflection of the dances of power observed in the family of origin. Gottman suggested that the individual with less power in the relationship may resort to criticism, contempt, defensiveness, and/or stonewalling (i.e., disengagement) in order to resolve conflict. In contrast, the individual with more power in the relationship may become autocratic or use "bullying" behaviors. Blanton and Fox (1995) defined power in a couple relationship in terms of power bases. Personal power (i.e., the relative influence one has and another based on the nature of their personal relationship and the ability to exert authority through the relationship context) and positional power (i.e., influence gained through ascribed status, control of resources) have been traditionally gendered in their assignment. However, a newlywed couple who is more egalitarian in their relationship will likely resolve their conflicts through bargaining, reasoning, negotiation, or compromise and share power bases.

The role that power and decision making play in a couple's transition to marriage is also critical. According to Blumstein and Schwartz (1983), the question of how power gets distributed in a marriage used to be more clearly prescribed by society. Now, the contract is more complicated. Because of the re-examination of traditional gender roles, there are no clear guidelines for what domains (e.g., money, parenting, division of labor) are assigned for a husband and a wife.

For example, the division of labor within the household can be significantly impacted by the balance of power and the patterns of decision making the couple implores in their marital relationship. Both international and national data showed that in Western countries, men were performing slightly more housework and women were doing slightly less than in the past (Bielby & Bielby, 1989). However, overall, women are still assuming the major responsibility for most household tasks by doing 80% of the female dominated jobs (i.e., cooking and cleaning), as well as 37% of the male dominated jobs (i.e., yard work) (Abbott & Koopman-Boyden, 1981), which according to Olson et al. (1989) leads to a decreased level of reported marital satisfaction over time. Factors that might impact the division of labor in a newly-married household include: age at marriage, absence or presence of children, and employment history (Pittman & Blanchard, 1996).

Familial Issues. Familial interactions, influences, and issues are significant in a couple's successful transition to marriage. Theorists (e.g., Bowen, 1978) have indicated that family background factors can influence everything that people were, wanted to become, or do. According to McGoldrick (1989), good clues about a new couple's relationship can be found in the marital relationships of their parents, the couple's primary models for what marriage involves. The other basic model for spouses is their relationship with their siblings, their earliest and closest peers. It is in the family of orientation that an individual learns his/her earliest and sometimes most powerful lessons about intimacy, boundary, and structural relationship maintenance, distance/closeness, and develops positive perceptions of marriage that lead to relational health (Bray, 1995; Fine & Hovestadt, 1984; Larsen & Olson, 1989).

Familial Issues: New Boundaries, Differentiation, Triangulation, and Fusion. Establishing new couple boundaries, both between the couple and their families and within the couple unit itself, is a critical task during the transition to marriage. Newlyweds must place a higher priority on the relationship with their marital partner and individuate/differentiate with some of the close attachments they may have formed with parents, children, siblings, and relatives (Bowen, 1978; Bray, 1995; Mace 1989). Although this realignment of close

attachments may cause a great amount of resentment for all involved (Arond & Pauker, 1987), a couple must form a differentiated dyadic unit, define a new system, and accept the implications of the realignment in order to avoid an unhealthy enmeshed relationship (Bray, 1995; Carter & McGoldrick, 1989). Additionally, the family of orientation must accept and support these structural and emotional breaks or realignments (Minuchin, 1974; Holman & Li, 1997), particularly where important loyalties to one's family of orientation (i.e., financial dependence) exist that may prevent or impede the newly-established couple from achieving their needed independence.

The newly-married couple must also contend with the processes of triangulation and fusion as they make the transition into marriage. According to Bowen (1978) and Friedman (1985), the involvement of a third party (e.g., triangle) in a relationship as a way of diffusing some of the pressure and tension between the couple and can have a negative effect on the couple's relationship. Predictable triangles can occur in the renegotiation of parent/child, sibling, and grand-parent relationships which can serve both a healthy and hazardous function (Bray, 1995).

According to McGoldrick (1989), fusion is an additional challenge a couple must deal with as they make the transition to marriage. There is a vast difference between forming an intimate relationship with another person and using a couple relationship in an attempt to complete one's sense of self. The process whereby people seek to enhance their self-esteem in marriage is based on denying their "differentness" from their spouse. This assertion of their "one-ness" as a couple can result in severe distortions in communication in order to maintain the myth of agreement (Bray, 1995; Satir, 1967). Bowen (1978) suggested that there was a universal tendency to seek fusion as a function of an individual's lack of differentiation from his/her family of origin. Gender differences can influence the way in which fusion is experienced (McGoldrick). McGoldrick suggested that women have traditionally been raise to consider "losing themselves" in a relationship to be normal and express their fusion by maintaining pseudo-intimacy; whereas, men have traditionally been socialized to view intimacy as frightening. Rubin (1983) also stated that in marriage women are more likely to struggle with fears of estrangement and men with fears of ensnarement. Therefore, the critical goal of a new couple as they make the transition is to form a family that shares a sense of healthy interdependence rather than one that is totally independent or dependent.

Familial Issues: Family Constellation. Another important familial influence on the transition is the family constellation of both spouses. Theory has proposed that couples who married mates from complementary sibling positions enjoyed the greatest marital stability because they experienced fewer power struggles and were more comfortable in and familiar with interactional dynamics (Adler, 1978; Toman, 1976). However, Toman explained that those who married spouses from non-complementary sibling positions would have more demands and thus more adjustments to make in marriage. Related issues to family constellation include the spacing of siblings, the extent to which parents encourage cooperative, rather than competitive relations among siblings, and how gender differences and related issues were experienced. Stinnett (1969), however, found no empirical evidence to support Toman's notion of sibling position as an influence on perceived readiness for marriage. Greater empirical attention needs to be given to address this area.

Familial Issues: Parental and Sibling Approval of Spouse/Marriage. According to Aldous (1996), Cate and Lloyd (1992), and Larson and Holman (1994), parental approval or blessing of marriage was considered important and of value to individuals even after they have

left home and are on their own in constructing their own identity. Stewart and Olson (1990), in their study of engaged couples, found that if both sets of parents or only one set of parents were negative about the upcoming marriage, the majority of the engaged couples had low premarital satisfaction. In contrast, if both sets of parents were positive about the marriage, the majority of engaged couples experienced a positive premarital relationship. Holman and Olsen (1997) found that individuals with positive childhood relationships with mother and father were more likely to have high quality marriages. This was especially true for daughters. Regarding parental influence on mate selection, research has shown that the influence of mothers on mate selection is greater than the influence of fathers. Simultaneously, mothers' influence on sons is greater than on daughters, and fathers' influence on daughters is greater than on sons (Jedlicka, 1984).

In consideration of all the many factors influencing mate selection (e.g., parental influence, education, faith), the influence of siblings has been relatively unacknowledged. Sibling relationships are considered to be familial relationships with the greatest perpetual longevity. Sibling relationships are often the context for learning about issues of intimacy, sexuality, and courtship (Banks & Kahn, 1994). In closer examination of the nodal relationship events and roles (e.g., dating and courtship, choice of mate, decision to marry, bridesmaid or best man of the wedding party) associated with the transition to marriage, rarely will one find the influence of siblings absent. Siblings have long since provided supporting approval (e.g., sibling gossip) and/or disapproval (e.g., hazing, teasing) during these transitional periods (Adler, 1978; Goode, 1994; Toman, 1976).

Social Issues: Social Integration. Grover, Russell, Schumm, and Paff-Bergen (1985) proposed that those individuals who had a number of successful friendships, participated in a variety of social activities, and who were members of social organizations were better able to establish successful marriages than were those individuals who were more socially isolated. The relational aspect of marital readiness in the transition to marriage also includes the couple's emotional differentiation from their parents, their readiness for sexual exclusiveness, and their willingness to assume responsibility in the relationship (Holman & Li, 1997). The social support that individuals can draw from their interactive networks (Holman & Olsen, 1997; Milardo, 1986) both helps buffer them from stress as well as being a resource for coping with stress, even after one year of marriage. Supportive relationships also help provide a continuity in one's sense of individual identity during the marital transition (Surra, 1990). Interestingly, in cases where social network interference exists, relationship progress can become hampered, especially in couples whose relational commitment developed quickly and subsided during the engagement period (Surra, 1987).

Social Issues: Work/Family Demands. An additional context impacting a couple's transition to marriage is their balancing of work/family demands. Brunstein, Danglemayer, and Schultheiss (1996) found that husbands' and wives' satisfaction was differentially related to spousal support of relational goals and individual goals outside of marriage. Olson et al. (1989) reported that newlywed couples in their study indicated that work/family strains (e.g., new job/career, new job responsibilities) were the number one ranked stressors challenging newly-formed marriages. Blumstein and Schwartz (1983) had earlier found that individuals, particularly wives, reported increased levels of self-esteem, self-concept, and self-worth were positively correlated with employment. However, at the relational level, employment seemingly "spills-over" into the couple's leisure and recreational time, the development of couple intimacy, reducing energy levels, and subsequently increasing the stress levels of dyadic relationships (Arond & Pauker, 1987). Arond and Pauker explained that "love" and "work" have oppositional

goals with love reducing boundaries and work increasing boundaries. As a result, they found that 60% of newlyweds reported work/family attitudes had shifted since the onset of marriage. Early adulthood is a time in which both marital and work roles may be new and thus demanding. At times the demands from these two domains create stress.

Implications for Future Theory, Research, and Practice

Because the transition to marriage and the complexity of its processes, this literature review was not an all-inclusive attempt to cover the entire breadth of the transition. However, we have identified the salient developmental issues that were most frequently reported in the literature, and as a result we have identified several areas that remain lacking in the literature.

First, much of the literature on the transition to marriage is anecdotal, thereby lacking the empirical data to refine concepts and theories used to explain the transition to marriage and all of its varied processes. Along with choices of education and career, social mores continue to suggest that selection of a life-long mate is one of the major developmental tasks facing young adults. According to Alfred Adler (1978), marriage is part of the three tasks (i.e., work, friendship, and love) that the human community sets for every individual. These three tasks, specifically marriage, are crucially important to the individual and society because neither can achieve fulfillment without successful attempts at dealing with the demands of these tasks.

Furthermore, researchers and therapists have confirmed that the condition of one's marriage has far-reaching implications for parenting, mental and physical health, and job satisfaction (Carter and McGoldrick, 1989). Therefore, greater empirical attention should be given to this important transition as this understanding would assist in ameliorating many of the deleterious effects (e.g., psychological distress, poverty, family violence, single parenting, abuse, marital conflict avoidance) resulting from marital conflict and demise (Bray, 1995).

Second, much of the research exploring issues like attitudes, expectations, and beliefs in the transition to marriage has used samples comprised of college students (Larson, 1988a; Salts et al., 1994; Intons-Peterson & Crawford, 1985; Fine & Hovestadt, 1984) who were anticipating the transition to marriage rather than actually preparing for marriage. Although there were some studies that used samples of couples who were engaged or preparing for marriage (Abbott & Koopman-Boyden, 1981; Craddock, 1983; Holman & Li, 1997; Sullivan & Bradbury, 1997), more research with couples actually making the marital transition is needed because these studies likely would give a more detailed, specific, and timely view of couple attitudes, expectations, and beliefs about marriage and partners. In addition, it is recommended that longitudinal, multi-trait, multi-method, and comparative cross-cultural studies on the transition to marriage be conducted (Larson & Holman, 1994).

Third, based upon our literature review on couple preparation for marriage, it became clear that effective premarital education was an area deserving more attention and that this education be made more readily available to the general public. Fowers and Olson (1986) and Senediak (1990) have indicated that the quality of the premarital relationship and the subsequent marriage can be enhanced through education. Although, several marriage preparation programs and premarital assessment instruments (e.g., FOCCUS (Markey, Micheletto, & Becker, 1985); PMIP (1984); PREP-M (Holman, Larson, & Harmer, 1989); PREPARE/ENRICH (Olson, Fournier, & Druckman, 1986) have been designed and implemented with positive outcomes (Larson et al., 1995), greater effort needs to be given to exploring the topics, formats, recruitment efforts, and delivery systems of interest to couples preparing for marriage (Duncan, Box, & Silliman, 1996; Silliman & Schuum, 1989; Silliman & Schuum, 1993; Silliman, Schuum, Jurich,

1992; Sullivan & Bradbury, 1997). Much of the wedding preparation a couple receives is obtained from commercialized, popular, "over-the-counter" self-help materials (i.e., magazines, books, and television). Unfortunately, in many instances, these methods are the only form of marriage preparation couples may experience, which for some, may be inadequate preparation. For example, women's magazines featuring wedding preparation ideas and relationship tips are prevalent in our society; however, men's magazines do not frequently feature or give the attention to the same issues. Such patterns establish and reaffirm the myth that women should think, plan, and dream about their weddings all their lives, while, men seemingly just happen upon this union of marriage needing no pre-planning or preparation. Education should also expand the learner's awareness and understanding of the transitional needs of the opposite gender thereby avoiding a gender-biased educational vacuum of needs; therefore, education must be changed or be designed to meet these needs.

Family life educators must realize that as our society grows more complex so do the relationship needs of couples entering into marriage. Therefore, a more proactive approach to premarital education is encouraged including the implementation of premarital education programs offered in Family and Consumer Sciences classes in schools, in Extension programming, and through community education programs. These educational programs can be taught by those individuals (e.g., family life educators, social workers, and clergy) who have an understanding of relational dynamics and are capable of helping prepare individuals and couples identify and develop relationship awareness and readiness, relationship strengths and skills that secure a relationship foundation.

Fourth, we recommend that preparation program curricula should conduct premarital needs assessments in order to assist individuals/couples in developing greater awareness of self and partner, increase self-disclosure, enhance intimacy, and build relational skills and strengths with the ultimate goal of strengthening and enriching individual and relational well-being (Buckner & Saktson, 1985; Guerney & Maxson, 1990; Hanson, 1981; Hof & Miller, 1980; Larson & Holman, 1994; Sheek, 1984; Thomas & Arcus, 1992; Williams, 1992). Program objectives and learning activities should assist the individuals/couples in identifying "felt" needs (i.e., those expressed by the learner) and "ascribed" needs (i.e., those identified as important to know about by someone other than the learner) with regards to family of origin issues, like boundaries, differentiation, triangulation, and fusion, communication processes, conflict resolution skills, financial management, and sexuality issues, among others. Structured learning activities (e.g., role plays, genogram preparation, projection exercises, critical incidents, simulation games) that require high participant involvement and open the learner to the exploration, experimentation, and evaluation of new insights and behaviors have been most effective in bringing adult learners to a partial/full mastery of the stated objectives (Hall, 1971; Knowles, 1980).

Fifth, in order to increase couples' interest in and participation in premarital education programs, these programs should be advertised using a variety of different sources like Internet sites, university and high-school classrooms, community and agriculture/extension programs, bridal shows and programs, and the public media (i.e., public service announcements). Through these various sources, recruitment efforts should be appealing to both men and women recognizing the influences of gender on the decision-making process to participate in educational workshops (Kieren & Doherty-Poirier, 1993).

Finally, we would encourage and solicit civil legislators and governments to join religious educators in becoming more proactive in their development of premarital and/or newly-

married programs for couples and also provide the necessary funding for pre-marriage preparation. Historically, clergy have been the gatekeepers of most wedding ceremonies as they perform 80% of the exchanged vows (Knox, 1985). From a prevention perspective, we know of no state and few religious organizations requiring or mandating premarital preparation as a prerequisite for obtaining a marriage license. Seemingly, states are willing to provide a marriage license to couples and perform or recognize a couple's preferred religious rite without guaranteeing educational or relational proficiency. Thus, we recommend a collaborative effort between a community of educators that includes familial, religious, and civil prevention help-givers capable of providing premarital references and resources to transitioning couples regardless of gender, race, economic status, education, or religion.

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NUTRITION SCIENCE ONLINE: PROFESSIONAL DEVELOPMENT OF SECONDARY SCHOOL TEACHERS USING THE INTERNET

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Nutrition Science Online, an Internet course, was designed for secondary teachers to increase knowledge of nutrition science and comfort in using computers and the Internet, and to readily apply information learned in their classrooms. Participants= nutrition knowledge, self-perceived competence, and comfort using the Internet increased significantly as a result of the course. Those teaching the course identified several suggestions for use of the Internet for nutrition education.

The Internet is rapidly expanding as a tool for education and information. The increasing access to the Internet by children, parents, teachers and school personnel allows for numerous uses of this technology in the field of Family and Consumer Sciences (FCS). FCS teachers can utilize the Internet to communicate with students and colleagues, encourage student collaboration, keep current on research and professional development, and teach others at a distance (Kato & Hackman, 1997). Using the World Wide Web (Web) allows teachers and students to access content not available elsewhere, and, conversely, to share their own work with the world (Hackbarth, 1997). Use of the Internet by FCS teachers for professional development requires access to a computer, modem and phone line; an Internet Service Provider; and training in how to use this technology. Use of the Internet with students also requires classroom access to the Internet and ideas on how to guide students through the Web for learning in the family and consumer sciences.

One approach to increasing familiarity and use of the Internet by teachers is to offer a professional development course using distance education. Among the many advantages, distance education enables the students to learn without needing to travel great distances or arrange for logistical support such as child or elder care; to take advantage of educational offerings while maintaining full-time professional employment; and to access postbaccalaureate studies throughout the world (Cohen, Parnell & Amick, 1994; Laughlin, 1997). A computer-based approach to teaching nutrition would be of particular use for FCS teachers, as they would have the opportunity to learn the technical along with the subject matter skills that are needed in classroom applications. As teachers who are trained in nutrition are more likely to incorporate nutrition into classroom teaching than those who do not receive training (Stang, Story & Kalina, 1998), opportunities for accessible professional development courses in nutrition are needed. Teaching nutrition or foods as a science course offers additional advantages for students, such as

providing science credits for high school graduation (Miller, 1997). However, there are few published examples of nutrition science or other FCS courses taught primarily through the Internet (Achterberg, 1996; Cohen et al., 1997; Hayden & Ley, 1997), and limited availability of courses for non-university students. The purpose of this paper is to describe an Internet-based professional development course for secondary teachers and to provide recommendations for future courses of this type. Nutrition Science Online (NSOL) was designed for secondary teachers to increase nutrition science knowledge and applications, increase teachers' experiences with the Internet and increase integration of nutrition science and experimentation into the classroom.

Program Development

NSOL was developed by an interdisciplinary team of university faculty and staff with expertise in nutrition and in computer technology. A small grant (<$14,000) enabled the funding of course instructional and technical staff to develop and teach the course. University faculty incorporated the work into their university teaching responsibilities. The resultant non-degree course was designed to provide Professional Development Points (PDPs) for teachers upon course completion.

NSOL was designed using the WebBBS software, which allowed access in text or graphics modes (http://awsd.com/scripts/webbbs/). Registered participants could access the course through the Web using their local Internet Service Provider or the UMassK12 Internet server, an Internet host service designed especially for Massachusetts K-12 teachers and students. Participants were required to have access to any type of computer that had a modem and communications software.

Program Implementation

Training. Thirty-one teachers attended an introductory day-long workshop at the beginning of the course. Two Cooperative Extension agents in the midwest also participated in the course, but did not attend the workshop. The purpose of the workshop was to orient the teachers to the course structure, provide hands-on computer training, and allow for face-to-face interaction with staff and participants. A computerized dietary analysis program was distributed, and participants were trained in using this program off-line (Total Diet Assessment, Esha Corp., 1997). Also distributed were an introductory nutrition textbook (Smolin & Grosvenor, 1997), a food experiment manual (Cobb, 1994), and a course workbook developed for NSOL with syllabus and detailed weekly instructions for performing on-line and off-line activities. Included in the training were reviews of the principles of nutrition science and the importance of critical thinking about resources on the Internet.

The course included many of the features of recommended Web-based instructional models, such as use of a syllabus, Web-links, threaded discussions, e-mail, a resource page, and on-line submission of work (Estabrooke, 1999). With this format, we were able to take advantage of the strengths of distance education by encouraging working at one's own pace and time while maintaining the importance of group identity as provided by face-to-face learning. Group identity at a distance was maximized by dividing participants into three groups and assigning them to work predominantly with one of three instructors throughout the ten-week course. Groups were further divided into "pods" of four to six people for some activities and assignments to facilitate interaction among participants. Guidelines for facilitating on-line

courses, as described by Harasim et al. (1995), were used to improve clarity and communication within the course.

Weekly Flow of Events

The course was divided into five units, each taking approximately two weeks to complete. The five areas of emphasis included carbohydrates, lipids, proteins, energy balance and exercise, and the role of vitamins and minerals in health and disease. Each unit focused on the basic science of the topic while exploring its personal application. Course assignments included suggested experiments to be completed in the classroom, opportunities to explore the Web, and ideas for using the computer as a resource.

During the course the participants, working on computers in their homes or schools, performed required activities guided by the workbook. Interaction in the course was primarily on-line. Participants used the WebBBS System to find answers to research questions with the aid of links in the NSOL Web page "Library"; performed on-line self-assessment quizzes in "Testing 1, 2, 3"; and posted evaluations of experiments carried out at home or in the classroom in "Dr. Jekyll's Lab" bulletin board. They also posted and read messages from their pod members, either in the "pod" or "Recipes Page" bulletin boards as directed by the workbook, or in the "Virtual Cafe". Participants also posted messages about controversial issues in "The Great Debates" area. In addition, messages could be publicly or privately (confidentially) posted to and from the instructors. An "Administration" Web page was developed for participants to check for updates or changes in the course assignments, and to serve as a way to contact the nutrition or technical staff. Off-line, the participants completed activities from the text book and analyzed their food intake using the diet analysis program.

Active learning was particularly encouraged in the final unit, which was a project based on cooperative learning, with participants taking ownership of the project and the instructor serving as a guide (Bostock, 1997). Participants worked in their pods to develop a lesson plan about calcium, iron, or vitamin A or C. Participants communicated by e-mail to determine important objectives and concepts for the lesson, develop appropriate classroom activities, find Internet-based resources that students could access to learn more about the topic, and develop ways to evaluate how well the objectives were met. One pod member, serving as the "facilitator" for the project, compiled each pod member's contributions to the lesson, posted drafts of the lesson plan for pod members to edit, and posted the final lesson in the NSOL main menu.

Final Meeting

A final half-day workshop was held at the end of the ten-week course, at which time participants made final preparations and shared their lesson plans. Focus group discussions were also conducted so the participants could share their NSOL experience with the staff and each other. Attendance at both workshops and completion of all required activities were necessary to receive the 30 PDPs for the course. However, due to travel limitations, some teachers were excused from the final workshop.

Methods

All 33 participants completed a pre-test, either at the initial workshop or via mail before the course began. Nutrition knowledge of material covered by the course was assessed using 20 multiple-choice questions. The questions were reviewed by the instructional team for clarity and coverage of the nutrition content expected in the course. Split-half reliability was computed

using the Spearman-Brown formula (Nachmias and Nachmias, 1987), with r = 0.60. Ratings of comfort teaching nutrition and familiarity with computers and the Internet were determined using 3-point Likert scales. The nutrition knowledge test and computer and nutrition comfort ratings were administered again at the final workshop for 21 participants or via mail for an additional 5 participants. Course evaluations, including ratings of satisfaction with the course and method of instruction, were also obtained at this time. Pre- and post-test scores were matched for each individual and paired t-tests were performed to evaluate changes in participants' nutrition knowledge and comfort in using various Internet services.

Results

Over half of the participants (53%) were family and consumer science teachers and 16% were science teachers; the other participants taught health, physical education, or other disciplines. Fifty-seven percent of participants taught at the high school level, 23% taught at the middle school/junior high level, and the remainder taught at the elementary level or worked outside of the K-12 classroom. Most participants were women (81%) with at least some Internet experience (71%).

Participants' nutrition knowledge test scores significantly improved from start to end of the course , but comfort in teaching nutrition remained the same (Table 1). A significant number of the participants felt more comfortable using search engines to search for Internet resources, using e-mail, and downloading and printing files after completing the course. Comfort in using Web browsers did not change significantly as a result of course participation.

Most participants reported that they spent between 1 to 4 hours each week performing off-line assignments, such as textbook reading, analyzing diets, and completing assigned activities. There was wide variation in the number of hours they spent on-line completing activities such as Web research, or communicating with participants and instructors; nearly half spent 1-4 hours weekly, while most others spent 4-6 hours each week on-line.

Table 2 lists how participants, on average, perceived the adequacy of the course in various respects. On a 5-point scale, time allotted to complete activities, ability to get questions answered, and amount of participant-instructor interaction were rated very highly (4 or above). Participants had slightly lower, yet positive ratings (3.8) for the amount of time allotted to complete assigned readings, ability to get problems solved, and amount of participant-participant interaction. Overall ratings of course value, amount learned, self-reported increase in competency in nutrition and computers, and effort expended on the course were very high.

In response to open-ended questions of behavior change, 21 respondents reported making or planning to make nutrition or health-related changes, including exercising more (52%) or changing some aspect of their diet (57%), such as lowering fat intake or increasing fruit and vegetable consumption. When asked how they plan to use the Internet for personal or professional purposes, 86 percent of the 21 respondents said that they wanted to use the Internet to find resources for the classroom. Participant plans included developing a nutrition and health course using the Internet as a kind of on-line textbook for students, making a Home Page for their classes, and teaching their students to use the Internet. In evaluating changes that they had made or planned to make in their classroom teaching as a result of taking the course, 40 percent of the 20 who wrote responses stated that they wanted to use computers more with their students. Thirty-five percent were using or planned to use more hands-on activities and experiments in the classroom, while 35 percent planned to update nutrition curricula or add a nutrition unit to their present lesson plans.

When asked what they found most difficult about the course, 44 percent of the 23 respondents who answered this question pointed most frequently to technical problems they had with their hardware or Internet server, which made it impossible for them to connect to the course Website. Thirty percent of the 23 respondents found it difficult to make time at home for the course. In contrast, few participants found any aspect of the course to be "too easy".

Participants recommended several changes for future computer-based courses. Eleven percent of the 18 respondents who offered suggestions felt there should be more computer training before the class began and that Internet access from home should be a prerequisite. This was further supported by comments participants made in focus group evaluations. Eleven percent stated that more time should be allowed to complete the program; another 11% suggesting reducing the course workload. Seventeen percent felt more participant-participant communication should be built into the course, allowing the entire class to communicate with each other. Four respondents liked the hands-on aspect of the course and recommended incorporating more experiments and laboratory exercises into future courses.

Discussion

NSOL was developed to provide an accessible method of continuing education for secondary school teachers of family and consumer sciences, health, and science. As a result, nutrition knowledge and computer competency increased in participants. Many of the participating teachers were planning to incorporate the nutrition or technologies they had learned into their classroom teaching, supporting the work of Stang et al. (1998), who found that teacher training is associated with use of nutrition in the classroom. It is interesting to note that comfort teaching nutrition in the scale used here was not significantly changed by the course. As most participants were somewhat or very comfortable teaching nutrition at both pretest and posttest, it is possible that there was a ceiling to this response. In addition, the 10 weeks of the course was a relatively short time for teachers to be able to try any new nutrition activities with their students. Follow-up studies are needed to determine if actual use of nutrition in the classroom occurs in those intending to increase nutrition teaching.

It should be noted that the changes observed in NSOL cannot be attributed solely to the on-line portion of the course; the two required in-person workshops may have facilitated the positive changes observed. While requiring face-to-face meetings may prevent some participants from joining the course due to travel constraints, it also helps to facilitate the participant-participant interaction and instructor interaction for the remainder of the course. In the case of NSOL, the hands-on training was required for learning the WebBBS interface. However, the two participants with Internet experience who were unable to attend the training were able to learn the system quickly. As the public increases their facility with the Internet, there may be no need for in-person training from a technology standpoint. Nevertheless, the advantages of on-site training for facilitating the interaction during the learning process may still lead one to utilize it despite the potential disadvantages. Achterberg (1996), in her e-mail course, did not require an initial in-person workshop, but cited this as a recommendation for future courses.

From a teaching standpoint, in addition to onsite training, NSOL had several features that enhanced learning and reduced the potential instructor burden that can occur when there are too many e-mail messages for the instructor to read. Using three instructors, each with a small section of students, helps keep both instructor and participant focused, while allowing the instructor to follow participants' progress and improvement. It is useful for both participants and

instructors to have a workbook with all assignments, instructions, and deadlines clearly stated at the beginning of the course. It is also helpful to use conferencing software that allows for threaded discussions and multiple areas on the Web for posting messages, so that pertinent information is categorized, organized, and easy for participants and instructors to find. In order for participants to have meaningful discussions, but not become overwhelmed with the volume of messages, dividing students into groups of 4-7 and allowing them access to reading only their group=s material for many, but not all, assignments is ideal.

One recommendation to allow for more time to complete the course, is to offer NSOL for graduate credit and use the entire 14-week semester for coursework. We are currently offering such a course, with greater emphasis on learning and behavior change theories and application, additional incorporation of group learning approaches, and added research assignments. With this approach, teachers will be able to increase in nutrition and technology knowledge and skills and extend them to the classroom with the convenience of learning from their own homes.

Applications

NSOL is an effective means of distance learning that allows participants to learn about nutrition and gain technological skills at the same time. A course at any level of nutrition could be offered to a wide range of professionals who require continuing education, as well as to members of the general public who simply desire to learn more about nutrition. The Internet can be used for communication via e-mail; newsgroups, conferencing and on-line chat sessions; and/or for access to the large base of nutrition and health information and resources available on the Web. Studies of cost-effectiveness are needed to determine the most feasible distance education approaches resulting in positive nutrition outcomes.

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Table 1.
Nutrition and computer competency ratings as a result of course participation

Competency Measure	Pretest	Post-test	Paired t	p value
Nutrition Competency				
Comfort teaching nutrition[a]	1.8	1.6	-1.32	0.200
Nutrition knowledge score[b]	10.9	12.3	2.18	0.040
Computer Competency[c]				
Using search engines	1.4	2.3	5.60	0.000
Downloading/capturing files	1.3	1.6	2.04	0.055
Using e-mail	2.0	2.3	2.32	0.031
Using Web browsers	1.7	2.1	1.90	0.072
Printing files	1.5	2.4	6.10	0.000

[a] Ratings of 1 = very comfortable, 2=somewhat comfortable, and 3=not comfortable.
[b] Potential scores range from 0 - 20.
[c] Ratings of 1= not comfortable, 2=somewhat comfortable, and 3=very comfortable

Table 2.
Participant ratings of course adequacy and overall value.

Course Measure	Mean Rating	Standard Deviation
Course Adequacy (n=25)[a]		
Time for completion of activities	4.1	0.8
Time for reading assignments	3.8	1.0
Response to questions	4.0	1.0
Problem solving	3.8	1.0
Participant-instructor interaction	4.6	0.7
Participant-participant interaction	3.8	0.8
Overall Rating (n=26)[b]		
Value to participant	4.7	0.6
How much learned	4.6	0.7
Increased competency in nutrition	4.2	0.7
Increased competency with computers	4.6	0.7
Effort expended on course	4.5	0.7

[a] Ratings on a 5-point Likert scale, with 1= Not at all; 5=Very sufficient
[b] Ratings on a 5-point Likert scale, with 1= Not at all; 5=A great deal

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EXPLANATORY STYLE OF FAMILY AND CONSUMER SCIENCES TEACHERS

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Using the Attributional Style Questionnaire developed by Seligman (1984), the explanatory style of 47 family and consumer sciences (FACS) teachers was described according to their Composite Negative (CoNeg) Composite Positive (CoPos), and Composite Negative and Composite Positive (CPCN) scores. Based on results of composite scores, (CoPos, CoNeg, and CPCN), FACS teachers were optimistic. The planned comparisons approach on years of teaching experience revealed no significant difference between teacher groups. The results of this study indicated that secondary FACS teachers in Georgia had an optimistic rather than a pessimistic explanatory style.

During the past two decades, the curriculum in family and consumer sciences (FACS) education has undergone many changes. These changes are partly due to such events as the series of publications by Marjorie Brown and those she coauthored with Beatrice Paolucci (1978, 1979, and 1980) and The Carl D. Perkins Vocational and Applied Technology Education Act Amendments (1990 and 1998). The effects of these two phenomena are recognizable in the FACS education curriculum through both program and course offerings. In fact, secondary FACS education programs are moving toward career preparation and an interdisciplinary curriculum, and many programs deliver the content using a critical science perspective (Smith, 1998).

In the early 1980s, Marjorie Brown stimulated interest with her proposal of a different curriculum approach in FACS education, critical science. This approach was very different from the traditional technical (how-to) perspective. The critical science perspective was practical, problem-based, and focused on practical perennial problems that families encounter. On the other hand, the traditional technical perspective shared expert ways of completing tasks. Although Brown's proposals have not been labeled as revolutionary, they have helped to promote changes in the way FACS educators view, conceptualize, and deliver the subject matter of FACS.

The Carl D. Perkins Vocational Education Act, first established in 1984, focused on improving vocational programs and serving special populations--such as the underemployed, unemployed, and disadvantaged. The law was reauthorized in 1990 as the Carl D. Perkins Vocational and Applied Technology Education Act (American Vocational Association, 1993), and again in 1998 as the Carl D. Perkins Vocational-Technical Education Act (Hettinger, 1999). The 1990 act, known as Perkins II, strongly advocated the integration of occupational and academic skills to better compete in the world's economy. The most recent law, Perkins Act 1998, is expected to give states and local districts greater flexibility to develop programs while making them more accountable for student performance.

Although FACS programs have responded to the many mandates and proposals with innovative curricular and course offerings, the success of these programs depends on the perspective of the teacher toward change and adaptability. According to Pellatiro (1989),

American vocational-technical schools need teachers who exhibit positive professional attitudes. A positive attitude is generally conceived as a state of readiness to respond effectively in challenging situations. Organizing and managing curricular and program changes may prove to be challenging for FACS teachers. How FACS teachers react to various changes and additions in the curriculum can be detected through one's explanatory style. Explanatory style is a descriptive term used to describe the manner in which individuals habitually explain why life events occur as they do (Seligman, 1990). This study was designed to examine the explanatory style of FACS teachers.

Background

Explanatory style has been used extensively in psychological research to predict depression (Hjelle, Busch, & Warren, 1996; Peterson & Seligman, 1984; Seligman, 1990). The explanatory style theory offers a framework for examining optimism and pessimism (Seligman, 1990) and is a construct that emerged from the concept of learned helplessness. Explanatory style is a descriptive term used to explain variations in people's response to uncontrollable events; it reflects individual differences along three dimensions in how people habitually explain good and bad events they encounter in life. The first dimension is the extent that explanations are internal AIt's I@ versus external AIt's someone else.@ The second dimension contrasts stable AIt's going to last forever@ versus unstable AIt's short lived@ elements. The third is the global AIt affects everything that happens to me@ versus the specific AIt's only going to affect this@ dimension (Gottschalk, 1996; Peterson, Buchanan, & Seligman, 1995). According to Seligman (1990), individuals who give internal, stable, and global explanations for bad events are more prone to have a pessimistic explanatory style, whereas individuals who explain bad events in terms of external, unstable, and specific causes have an optimistic explanatory style.

Seligman (1990) distinguished the beliefs of optimists and pessimists to illustrate their opposing perspectives on difficult life events. Optimists believe that defeat is a temporary, situational setback that is not their fault. Pessimists believe that bad events are long-lasting, potentially undermining large portions of their lives, and likely to be their fault. The differing beliefs that distinguish optimists and pessimists have a direct impact upon their abilities to take actions in difficult situations.

According to some researchers, (Fry & Hibler, 1993; Moss & Johansen, 1991), optimism is described as an ability to consider challenging situations as opportunities rather than perceiving challenging situations as threatening, insurmountable tasks. Thus, whether FACS teachers view changes and initiatives as opportunities or threats may be understood using the explanatory style construct. Initially, we hypothesized that FACS teachers who adjust readily to change are needed to initiate these changes in curriculum and programs.

The explanatory style thesis is a new phenomenon in education; consequently, little is known about the explanatory style of teachers. Hall and Smith (1999) began the discourse on the explanatory style of teachers with a study on vocational teachers. Results from their study indicated that vocational teachers had an optimistic explanatory style. Further results of their study indicated that vocational teachers were similar on positive events (CoPos), different on negative events (CoNeg) and all events (CPCN). On negative events (CoNeg), business and marketing teachers were more optimist that trade and industrial teachers, family and consumer sciences and marketing teachers were more optimist than agricultural teachers. On all events (CPCN), business teachers were more optimistic than family and consumer sciences teachers and

business teachers were more optimistic than trade and industrial, technology and agricultural teachers.

Therefore, in this study, the researchers have attempted to determine the explanatory style (optimism or pessimism) of secondary FACS teachers. A secondary purpose was to determine if a relationship existed between years of teaching experience and explanatory style. Specifically, objectives of the study were to determine: the explanatory style of secondary FACS teachers based on positive events (CoPos)--how positively/optimistically one reacts to good events, negative events (CoNeg)--how positively/optimistically one reacts to bad events, and all events (CPCN)--how positively/optimistically one reacts to all events; and if differences exist based on years of teaching experience and positive events (CoPos), negative events (CoNeg), and all events (CPCN).

Method

The population of 760 secondary FACS teachers was used to achieve the sample. Based on Krejcie and Morgan's (1970) sample size table, the number of participants for a simple random sample was established at 67. For descriptive research, using the largest sample possible is recommended (Gay, 1987; Gall, Borg, & Gall, 1996). According to Fraenkel and Wallen (1990), the larger the sample, the more likely it is to represent the population from which it comes. Therefore, the sample size was doubled and the actual sample included 134 possible participants. Forty-seven (47) or 35% of the participants responded.

The data were collected using a mailed questionnaire developed by Seligman (1984) entitled "Attributional Style Questionnaire." The ASQ is designed to determine the individual's style of thinking; pessimistic or optimistic. The ASQ presents hypothetical good and bad events (e.g., "You are out on a date and it goes badly."). Participants are asked to imagine the event happening to them. The self-reporting questionnaire contains 12 hypothetical situations: 6 negative events and 6 positive events. Six of the questions relate to interpersonal/affiliation and six are achievement-related. There are four responses per situation. The first response is not scored; it used to prepare respondents for the next three responses. It asks respondents to provide a reason or cause for the situation. The second response deals with the internal or external dimension of explanatory. The third response deals with stable or unstable dimension of explanatory style, and the fourth response, is concerned with the global or specific dimension of explanatory style.

Respondent indicates on a 7-point rating scales, 1=completely external/completely unstable/completely specific to 7=completely internal/completely stable/completely global, the degree to which the cause was internal or external, stable or unstable, and global or specific with each dimension being rated separately. On the rating scale, positive situations range from a high of 7 to a low of 1, whereas negative situations range from a high of 1 to a low of 7.

The reliability for subscales of the ASQ (internal/external, stable/unstable, and global/specific) ranged from .39 to .64 and can be said to have unsatisfactory reliability (Reivich, 1995). However, when composite scores are formed (CoPos, CoNeg, CPCN), substantially higher and satisfactory levels of internal consistency are found (Reivich, 1995). The formation of composite scores (CoPos, CoNeg, CPCN) will be addressed in the following paragraph. On the composite measures, reported reliabilities were .69 and .73 for positive and negative scores, respectively. Some studies have found reliabilities of .72 for CoPos and .75 for CoNeg (Peterson, et al., 1982). For our study, reliabilities on the composite scores of .64 (CoPos), .61 (CoNeg), and .76 (CPCN) were calculated.

Scoring the Questionnaire

The three attributional dimensions (internal, stable, and global) rating scales associated with each event description are scored in the directions of increasing internality, stability, and globality. That is, the scales are anchored so that external, unstable, and specific attributions receive lower scores (optimistic), and internal, stable, and global attributions receive higher scores (pessimistic). So on the negative dimension low scores are more optimistic and high scores are more pessimistic, while on the positive dimension low scores are more pessimistic and high scores are more optimistic. The formula for determining composites of negative dimensions/events, positive dimensions/events, and all events are following. For the positive events, Composite Positive Attributional Style (CoPos), you sum the total of all positive situations scores and divide by the total number of positive situations. For example, the best score is 7 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 positive situations equals 21. The worst score is 1 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 positive situations equals 3. The range of scores is 21 to 3. This score reflects how positively or optimistically one reacts to good events.

For the negative events, Composite Negative Attributional Style (CoNeg), you sum the total of all negative situations scores and divide by the total number of negative situations. For example, the best score is 1 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 negative situations equals 3. The worst score is 7 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 negative situations equals 21. The range of scores is 3 to 21. This score reflects how positively or optimistically one reacts to bad events.

For all events, Composite Positive minus Composite Negative (CPCN), was computed by subtracting the lowest scores 3 (lowest CoPos) - 21 (lowest CoNeg) = -18 and the highest scores 21 (highest CoPos) - 3 (highest CoNeg) = 18. The negative score (-18) is less optimistic (pessimistic) whereas the positive score (18) is most optimistic. Therefore, the range of scores for CPCN is -18 to 18. This score reflects how positively or optimistically one reacts to all events, a measure of overall explanatory style, optimism or pessimism.

Procedures

A cover letter and questionnaire were mailed to 134 secondary FACS teachers in Georgia. The questionnaire packet included a pre-addressed, stamped return envelope. According to Dillman (1978), a follow-up postcard should be sent in approximately 14 days. Thus, in 10 days, a letter was mailed to participants who had not responded, reminding them to complete the survey. Dillman (1978) further states that after a two-week period, a second questionnaire should be sent. Consequently, two and a half weeks later, a second questionnaire was mailed to participants who had not responded. At the end of the data collection period, 47 (35%) of the participants had responded.

According to Miller and Smith (1983), comparing early respondents with late respondents will allow one to estimate the representativeness of late respondents to nonrespondents. So as questionnaires were received, dates were recorded. After data collection ended, a t-test was used to compare early and late responses to determine if they were different. Results revealed no statistically significant difference between early and late respondents. With the assumption that late respondents are more typical of nonrespondents, generalizing from respondents to the population was warranted. Therefore, generalizations were made to secondary family and consumer sciences teachers in Georgia.

Findings

In order to determine the relationship between years of teaching experience on explanatory style of FACS teachers, means, standard deviations, and the planned comparisons approach were used. Based on mean scores that ranged from 2.46 to 15.55 (see Table 1), FACS teachers had an optimistic explanatory style.

To determine the explanatory style of teachers based on years of teaching experience, descriptive statistics were used. On the range of years of teaching experience among FACS teachers in this study, interestingly enough, one teacher had one year of teaching experience and one teacher had 30 years of teaching experience with the highest count of four teachers with 10 years of teaching experience. Therefore, in order to better understand the effect of teachers in various stages of their careers, teachers were subgrouped according to number of years of teaching experience. This grouping yielded the following categories of teachers: 1-10, 11-20, 21 and over. On the Certified Personnel Data section of the Georgia Public Education Report Card, teachers are grouped in ten-year increments for years of experience (Georgia Department of Education, 1998). Teachers in this study were divided accordingly to stay with this categorization. In our study, there were only two participants with more than 30 years of teaching experience, therefore, they were included in the 21 and over group of teachers.

The planned comparisons approach was used to determine if teacher groups were different on years of teaching experience and positive events (CoPos), negative events (CoNeg), and all events (CPCN). Rather than testing whether several populations have identical means, the planned comparisons approach determines whether one population mean differs from a second population mean or whether the mean of one set of populations differ from the mean of a different set of populations (Olejnik & Hess, 1997). Analysis indicated no significant difference in positive events (CoPos), negative events (CoNeg), or all events (CPCN) and any teacher group.

Conclusions and Implications

The purpose in this study was to describe the explanatory style (pessimistic or optimistic) of secondary FACS teachers. Therefore, the following conclusions were drawn for FACS teachers in Georgia. First, FACS teachers had an optimistic explanatory style as indicated by scores on the dimensions of positive events (CoPos), negative events (CoNeg), and all events (CPCN). An optimistic explanatory style is characterized by attributing negative events to external (someone else), unstable (short-lived), and specific (not pervasive) causes rather than internal, stable, and global causes.

Second, teachers in this study are alike with respect to years of teaching experience and positive events (CoPos), negative events (CoNeg), and all events (CPCN). Family and consumer sciences teachers, regardless of the number of years of teaching experience, did not view negative events, positive events, and all events differently; they viewed them optimistically rather than pessimistically.

What is the connection between explanatory style and FACS education? During the past several years, FACS teachers have been faced with legislative mandates and curriculum issues. In the late 1980s, the critical science approach to curriculum development was a new phenomenon and was finding its way into some programs; whereas in the early 1990s, Perkins II had been passed, and as we approach the milieu the 1998 Perkins Act with its increased accountability was in effect. However, little attention has been given to how FACS teachers

adjust and adapt to program changes and revisions as dictated by legislation and issues. To ensure the success of mandates and related activities, it is important to explore the attributes of those responsible for implementing such programs.

The Seligman instrument has been found to be valid and reliable in the prediction of depression (Hjelle et al., 1996). However, in this study, it was used to predict what kind of disposition educators will display toward change and to predict how well individuals might adjust to change.

According to the explanatory style thesis, the difference between an optimist and a pessimist will determine how difficult situations are handled. The task of implementing, evaluating, and revising programs can be a challenging and demanding. However, based on the results of this study, secondary FACS teachers in Georgia, are optimistic and will view new initiatives as a challenge rather than a threat. Additionally, FACS teachers appear to be similar on the dimensions measured regardless of years of teaching experience, teachers at all stages of their careers appear to be able to respond to new developments and initiatives equally well. We believe that these teachers will adjust well to change and are inclined to try new programs and change curricular to met the demands of legislation and the workforce.

Generally, in an educational environment where greater attention is given to required courses and preparation for post-high school education rather than vocational programs, these findings should support and enhance the discussion and decision making process concerning curricular changes and new mandated programs. Specifically, the optimistic disposition of FACS teachers ensures the likelihood of new programs experiencing some degree of success.

Based on the results of this study, it is anticipated that FACS teachers will approach challenges presented by changing conditions in education and vocational education in general and in FACS education specifically, optimistically.

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About the Authors

Table 1
Explanatory Style of Family and Consumer Sciences Teachers based on Composite Scores

Variable	n	M	SD
COPOS	47	15.48	2.2
CONEG	47	12.10	2.4
CPCN	47	3.36	2.7

Table 2
Explanatory Style of Family and Consumer Sciences Teachers for Years of Teaching Experience by Composite Scores

Variable		CONEG		COPOS		CPCN	
Years	n	M	SD	M	SD	M	SD
1-10	17	15.54	1.8	12.63	1.6	2.88	2.0
11-20	17	15.05	2.4	11.64	2.8	3.40	3.0
21 – over	9	15.58	3.3	12.34	1.7	4.3	1.8
Missing	4						
Total	47						

PRE-SERVICE TEACHERS PERCEIVED SUCCESS OF CLASSROOM MANAGEMENT STRATEGIES

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One purpose of this study was to determine types of behaviors pre-service teachers viewed as inappropriate classroom behaviors. Secondly, the researchers examined the perceived success of classroom management strategies reported by pre-service teachers. The pre-service teachers were teaching in junior and senior high school classrooms in the areas of family and consumer sciences education, business education and industrial technology education.

Results indicated that talking, disruptive behavior, disrespect, inattention, and not doing/refusal to do assigned work accounted for the majority of the responses when identifying behavior problems. The most successful strategy reported in handling discipline behavior problems was verbal reprimand and the least successful strategy reported was ignoring the behavior. Implications for teacher education are discussed.

My 4th period Workplace Readiness class would not quit talking throughout the entire period. After many scoldings I finally gave up and sat at my desk. I didn't talk the rest of the period because I thought I might break down and cry." -Pre-service teacher (Week 3)

Classroom management is commonly referred to as the application of standards set in the classroom for positive student behavior. Classroom management has been identified as a critical skill for beginning teachers and pre-service (student) teachers (Armstrong & Savage, 1990).

A major concern of pre-service and beginning teachers is classroom management. Brock and Grady (1996) found classroom management and discipline were consistently ranked as major problems by beginning teachers and principals. Lack of student discipline and classroom management organizational skills were identified by pre-service teachers as areas that did not go well during student teaching (Rancifer, 1992). Stress related to classroom management was the most influential factor in failure among novice teachers in a study of classroom management strategies in the Chicago public schools (Greenlee & Ogletree, 1993). Gibbons and Jones (1994) found that novice teachers reported that in the early stages of their placement their concerns were primarily content -oriented, while toward the end their concerns were about classroom management.

Adler (1996) found that classroom management is a major concern of pre-service and beginning teachers. She suggests that such concerns can override efforts to promote reflective inquiry. Thomas and Kiley (1994) also found that first-year teachers' concerns tend to focus more on classroom management and discipline.

Design of the Study

One purpose of this study was to determine types of behaviors pre-service teachers viewed as inappropriate classroom behaviors. Secondly, the researchers examined the perceived success of classroom management strategies reported by pre-service teachers.

This study began in 1991 and ended in 1996. During this period, 48 pre-service teachers completed the teacher certification program at the University of Arkansas in the area of Vocational Education. All pre-service teachers were invited to participate in this study of classroom management techniques by completing an open-ended questionnaire during the 12 weeks of the student teaching experience. They were asked to identify those classroom behavior problems they were experiencing as well as to document how they addressed the behavior and how well they believed they handled the problems. The open-ended questionnaire was comprised of two statements: "This week, I handled this discipline problem most successfully by reacting in this way" and "This week, I handled this discipline problem least successfully by reacting in this way." The pre-service teachers were asked to write a weekly entry in response to each statement.

A total of 46 or 96% of the pre-service teachers agreed to participate in the study and complete the questionnaire. The pre-service teachers were in the vocational areas of family and consumer sciences education, business education, and industrial technology education. All completed their professional education courses at the University of Arkansas during the semester prior to entering student teaching. Each pre-service teacher received 4-6 hours of instruction related to classroom management in their methods courses.

The pre-service teachers completed their student teaching experience in vocational programs in public schools in Northwest Arkansas. Forty-four were placed in senior high schools and two were placed in junior high schools. The pre-service teachers were placed with cooperating teachers who had at least three years of teaching experience. The schools were located in rural communities with class sizes ranging from 15 - 30 students. After one week of observation, the pre-service teachers assumed teaching responsibilities for one class each week until they were teaching all classes during the day. The pre-service teachers completed the open-ended questionnaire on a weekly basis.

Although the information on the questionnaires was confidential, the supervising teacher, university supervisor, and pre-service teacher discussed classroom incidents in observation conferences.

Research Questions

The research questions to be answered were the following:

1. What types of behavior do pre-service teachers perceive as problems in the classroom?
2. What classroom management strategies were identified as most successful and least successful by pre-service teachers?

Methodology

Over five years, 46 pre-service teachers participated in the study. The sample consisted of 9 family and consumer sciences education, 35 business education, and 2 industrial technology education pre-service teachers.

An open-ended questionnaire was used to record the data. Each pre-service teacher was given 12 questionnaires to be completed during the 12 weeks of student teaching. Some students

did not report any behavior problems for the week and some reported more than one behavior on a single questionnaire.

Missing questionnaires were not included in the analysis of data. Missing questionnaires resulted when pre-service teachers did not turn in a questionnaire for one or more weeks.

Data Analysis

Content analysis was used to analyze the questionnaire entries. Content analysis is an objective and systematic technique to describe the content of any form of communication. In education, content analysis is aimed at producing descriptive information by answering questions directly related to the material analyzed and identifying educational problems (Borg & Gall, 1989).

Forty-six sets of questionnaire entries comprised the data for this study. During the time the students were in the classroom setting, the researchers did not read the entries since they were supervising the student teaching experiences of the pre-service teachers. The average length of a weekly entry was one page. Entries were entered into the computer using QSR Nud*ist 4 (1997) software. QSR Nud*ist 4 (1997) software (Non-numerical Unstructured Data Indexing Searching and Theorizing) is used to analyze data by documenting patterns or clusters of occurrences of keywords in the data. It searches for words and phrases in the text of documents and indexes the results.

Text from entries was examined for descriptors of classroom incidents that pre-service teachers perceived as problems and what classroom management strategy was employed as they reacted to the incident. Examples of major categories of problems were talking, disruptive behavior, disrespect and inattention. Examples of classroom management strategies identified, as how they reacted to the problem were verbal reprimand and ignoring the behavior.

The researchers validated the findings of the study by reading each entry to verify the cluster or patterns of occurrences identified by QSR Nud*ist 4 (1997) and to code additional problems and strategies not documented by QSR Nud*ist 4. The data were summarized through the use of frequencies. The information reported here are the thoughts of pre-service students about classroom behavior and strategies, not that of the researchers.

Results of the Study

Talking, disruptive behavior, disrespect, inattention, and not doing/refusal to do assigned work accounted for 333 (74%) of the 450 responses when identifying behavior problems. All behaviors and strategies are presented in Table 1.

The most successful strategy reported in handling behavior problems was verbal reprimand (68, 25%). Other successful strategies reported in rank order are listed in Table 2. As shown in Table 3, ignoring the behavior was the least successful strategy in handling behavior problems. Ignoring the behavior was mentioned 67 (35%) times and verbal reprimand was mentioned 66 (34%) times as least successful.

Many pre-service teachers reported the same strategy as the most successful while others saw it as the least successful way to handle the behavior. Verbal reprimand, ignoring the behavior, and taking students to the office were identified as both most successful and least successful strategies. In the opinion of the researchers, the pre-service teacher's reality was what was happening at the moment. They often dealt with the immediate problem and did not consider the history and personality style of the students, nor did they consider the circumstances leading to the problem. Most often if their reaction solved the problem, they identified it as most

successful; however, if the same strategy did not stop the problem, it was identified as least successful.

Below are two examples of how one student reported a strategy as most successful while another reported that same strategy as the least successful way to address a behavior. Both pre-service teachers responded to a behavior with a verbal reprimand. In describing a successful way to handle a behavior problem, one student wrote:

> *"There was a student that was talking while my other 'team' teacher was giving her lecture. Instead of going over and asking him to be quiet I just yelled his name out and told him to 'tone it down!' Later, I told the student that I felt it was rude of him to be talking while others were talking. He understood and I didn't have any other problems with him."* (Week 1)

In the second example, verbal reprimand was also used but the pre-service teacher identified it as a least successful way to handle a behavior problem.

> *"I raised my voice to a girl and I guess she didn't expect that because she got real defensive and talked back to me. She wouldn't let me explain why I was mad so then I had to raise my voice to talk over her. I should've just told her to be quiet and listen."* (Week 3)

Classroom Behavior Problems

The study of the pre-service teachers found (1) talking, (2) disruptive behavior, (3) disrespect, (4) inattention and (5) not doing/refusal to do assigned work as the most frequently reported classroom management behavior problems.

Other behaviors identified by pre-service teachers as inappropriate ranged from minor offenses such as gum chewing to serious problems such as vandalism and fighting (see Table 1). This shows the variety of problems encountered in a classroom. Some problems are the result of enforcing school rules and structures-cutting/skipping/leaving class, tardy, grading systems, dress code, smoking, and tobacco. Others reflect problems of teen culture - profanity, fighting, and racial slurs. Others reflect the teachers expectations and the classroom environment - inappropriate use of equipment, cheating, sleeping, not bringing required materials to class, clean up, eating, and chewing gum.

Talking

Talking was mentioned 135 (30%) times from a total of 450 responses (see Table 4). Descriptors were talking, talk too much while working, being loud, excessive talking, talkative, whisper, giggle, socializing, griping, and chattering.

Verbal reprimand was reported 27 (20%) times as the most successful strategy to deal with students talking. Separation (17, 13%) was frequently reported as a successful strategy for talking (see Table 4).

The following quotation from a selected questionnaire illustrates how a pre-service teacher described his or her most successful strategy for addressing talking: "This week I handled this discipline problem most successfully by reacting in this way . . ."

"I have six students in one of my classes that are constantly talking and acting up. I first gave them a verbal warning, and secondly proceeded to separate them. I think it is going to work." (Week 3)

Verbal reprimand (25, 19%) was also found to be the least successful way to deal with students talking followed by ignoring the behavior (13, 10%) (see Table 4). The following quotation from a selected questionnaire illustrates how a pre-service teacher described his or her least successful strategy for addressing talking.

"This week I handled this discipline problem least successful by reacting in this way . . ." *"Student disregarded direct request for no talking and even asked for a larger penalty. My tone of voice in reply was not appropriate."* (Week 1)

The most successful strategy mentioned for talking was verbal reprimand.

Verbal reprimand was also found to be the least successful strategy. The opinion of the authors was if the verbal reprimand led to a change in behavior, the verbal reprimand was perceived by the pre-service teachers as a successful strategy. Conversely, if there was no change in behavior, then the pre-service teachers perceived verbal reprimand as a least successful strategy.

Disruptive Behavior

As noted in Table 4, disruptive behavior was mentioned 83 (18%) times out of a total 450 responses for the five-year period. Descriptors for disruptive behavior were rowdy, moving around in chair, throwing paper, constantly walking around room, playing with equipment, constantly leaning back in chair, horse play, and hyper.

The most successful strategy reported for disruptive behavior was verbal reprimand (13, 16%) (see Table 4). The following quotation from a selected questionnaire illustrates responses from a pre-service teacher when describing the problem and his or her most successful strategy for disruptive behavior.

"This week I handled this discipline problem most successfully by reacting in this way .. ." *"A boy in my 4th period class proceeded to roll his chair out into the hall to visit with friends. I quietly told him to please move himself back into the classroom NOW! He did (no other problems with him the rest of the class)."* (Week 10)

As noted in Table 4, ignoring the behavior was found to be the least successful way to deal with disruptive behavior (11, 13%) followed by verbal reprimand (10, 12%). The following quotation from a selected questionnaire illustrates how a pre-service teacher described his or her least successful strategy for addressing disruptive behavior.

"This week I handled this discipline problem least successfully by reacting in this way . . ." *"Boys in 5th hour class were being rowdy and rolling around in their desks on Wednesday. I told them, repeatedly, to quit doing that, but they kept on. I ended up ignoring them. They would not listen."* (Week 9)

Disrespect

Disrespect was mentioned 54 (12%) times from a total of 450 responses for the five-year period (see Table 4). Descriptors were student acting like teacher wasn't there, disregarding direct request from teacher, talking back, and rude comments.

> "This week I handled this discipline problem most successfully by reacting in this way . . ." *"Again I had a video camera set up to record group projects and some students were hamming it up. I told them that this was serious business and that in the real world a presentation given like that would get them fired. 'But we are not doing this for pay.' My retort was that yes they were -- their grades were their pay."* (Week 6)

Ignoring the behavior (15, 28%) was the least successful way to deal with disrespect in the classroom (see Table 4). Verbal reprimand (8, 15%) was frequently identified as an unsuccessful strategy. The following quotation from a selected questionnaire illustrates a response from a pre-service teacher describing his or her least successful strategy when addressing disrespect.

> "This week I handled this discipline problem least successfully by reacting in this way . . ." *"I told a girl to put away her fingernail polish and she didn't. Instead of making her -- I let her finish and then put it away. I don't think this was good for the rest of the class to see. I need to be seen as legitimate -- and serious and having authority to enforce rules."* (Week 9)

Inattention

As noted in Table 4, inattention was mentioned 31 (7%) times by the pre-service teachers. Descriptors for inattention were not paying attention, writing notes, and doing homework from another class. Discussing the problem (3, 10%) was listed as the most successful strategy to deal with inattention in the classroom (see Table 4). The following quotation from a selected questionnaire illustrates a response from a pre-service teacher describing his or her most successful strategy when addressing inattention.

> "This week I handled this discipline problem most successfully by reacting in this way . . ." *"A boy was having problems paying attention in class so I asked to speak to him when the class was doing written work. I found out that the problem was a personal one that involved him not having the confidence to pursue his goal. I tried to tell him that he was the only one who would know when the time was right to pursue his goal. The afternoon hour, he came to another class and told me that he went out on a limb and asked. It worked and he's going to the prom with a date."* (Week 1)

As shown in Table 4, verbal reprimand (10, 32%) was listed as the least successful way to deal with inattention followed by discussing the problem (6, 19%). The following quotation from a selected questionnaire illustrates a response from a pre-service teacher describing his or her least successful strategy when addressing inattention.

"This week I handled this discipline problem least successfully by reacting in this way . . ." *"A student began to fall asleep in class. The cooperating teacher asked the student to go to the nurse's office if he can't stay awake in class. The students generally perk up. I had a student drift off today in Office Procedures. I tried the same methodology. It failed. The student just looked at me and closed his eyes again. I told him to pay attention. He never fully participated."* (Week 5)

Not Doing/Refusal to Do Assigned Work

Not doing/refusal to do assigned work was mentioned 30 (7%) times out of 450 responses (see Table 4). Taking the student to the office (3, 10%) was reported as the most successful strategy (see Table 4). The following quotation taken from a selected questionnaire illustrates a response from a pre-service teacher when describing his or her most successful strategy.

"This week I handled this discipline problem most successfully by reacting in this way . . ." *"I had a student refuse to do what I had told the class to do. So, I walked over to her desk and told her to quit messing with her computer and to read the second page handout. She threw the handout and said she would not do what I said. So, I wrote a note and sent the student to the principal's office. She returned with a note from the principal and then apologized to me."* (Week 10)

Deducting points (3, 10%) was reported as being the least successful strategy in addressing not doing/refusal to do assigned work (see Table 4). The following quotation from a selected questionnaire illustrates a response from a pre-service teacher when describing his or her least successful strategy in addressing not doing/refusal to do assigned work.

"This week I handled this discipline problem least successfully by reacting in this way . . ." *"With about 20 minutes remaining in the class, I noticed one of the students working at her desk who had not handed in her assignment. I asked her why she didn't hand in her work; she said she hadn't done it. I told her she had time left in the class today to finish it. She shook her head in agreement but never went to her computer to finish her assignment. I gave her a zero for the assignment but I should have told her to do her work or sent her to the office."* (Week 5)

Discussion and Implications for Teacher Education

Findings in this study are similar to that of Greenlee and Ogletree (1993) concerning the effect of teachers' attitudes on student discipline problems and classroom management strategies. In their study of the Chicago public schools, the four most frequently occurring discipline problems identified were (1) disrespect for fellow students, (2) disinterest in school, (3) lack of attention, and (4) excessive talking.

In this study, the behaviors were often influenced by a lack of planning and preparation as well as an inability to create an environment for student learning. This is one of the few entries that acknowledge that lack of planning was the cause of the behavior problems:

"I wasn't stern enough with my 2nd period keyboarding class. They got done early. There are only 3 girls in my class and the rest are boys. If I don't keep them busy they get a little rowdy. I should have had more planned." (Week 9)

The pre-service teachers did not experience serious classroom management problems created by societal or external influences. However, two incidences were reported by pre-service teachers of students fighting.

The pre-service teachers were not asked to discuss reasons for misbehavior but many of their strategies were not compatible to the behavior, which suggest they did not see the relationship between the behaviors and their own classroom practices, preparation, and ability to communicate effectively. Rather than addressing how they could change their classroom practices the pre-service teachers seemed to respond by addressing behaviors. If confronted with behaviors that they did not understand, they simply ignored the situation.

The number of different strategies used to address each behavior showed a lack of consistency in classroom management. The pre-service teachers seemed unable to consistently use the same classroom management technique to address specific behavior problems.

Findings suggest that pre-service teachers are not engaging in reflective inquiry in classroom management. It appeared to the researchers that the pre-service teachers' strategies remained the same throughout the 12 weeks. This study suggests that most often, pre-service teachers react to behaviors rather than reflecting on the cause of the problem. Here is one example of such a journal entry.

"I used mass punishment with one of my classes and made them do bookwork on a module day. Really, only a certain few were acting poorly in class." (Week 9)

Beach and Pearson (1998) found pre-service teachers' "strategies for coping with conflict and tension shifted from avoidance to expedient survival strategies to interrogation of their personal theories of teaching" (p. 337) as they became more aware of the complexity of teaching by reflecting in journals and small group sessions.

It appears from the findings of this study that pre-service teachers need more preparation in classroom management. In a study by DelGesso and Smith (1993), student teachers felt that classroom management was neglected in their teacher preparation program and asked that techniques in classroom management be incorporated in the methods classes. Britt (1997) found that beginning teachers voiced a need for more courses in classroom management and discipline because their pre-service training had not prepared them for the demands of teaching. A study by Kelly, Stetson, and Stetson (1997) recommended more emphasis on classroom management for both field-based year-long internships and the traditional semester student teaching experience. Gilberts and Lignugaris-Kraft (1997) recommend a core of classroom management knowledge and practices as part of a foundation for teacher professional development.

Pre-service teachers also need more mentoring programs (Farnsworth & Morris, 1995). Brock and Grady (1996) reported the need for a year-long induction program that included mentoring programs with careful selection, assignment, and training of mentors. A mentoring program should assist the pre-service teacher with any problems or concerns he or she may have. "In fact, the most effective mentors will readily admit that they have learned as much, if not more, from their protégés as the protégés have from them" (Farnsworth & Morris, 1995, p. 140).

Charnock and Kiley (1995) conducted a study to identify what beginning high school and middle school teachers found were their most valuable types of assistance. A teacher serving as a mentor and having a colleague to observe a class were two types of assistance found to be the most valuable.

Value of the Research

The problems identified in this study reflect the current attitudes of pre-service teachers and how they approach problems differently than experienced teachers. Examples discussed in this study can help mentor teachers see how problems are perceived by pre-service teachers.

In teacher preparation programs, the examples in this study can be used as case studies to initiate discussion regarding ways to handle a variety of classroom management problems. For example, improper ways of dealing with specific classroom management problems in this study can be discussed followed by identifying the best way to resolve the problems.

The researchers believe this study should be replicated with pre-service teachers who take a classroom management course prior to entering the student teaching. In addition, the survey instrument should be revised to allow pre-service teachers the opportunity for in-depth reflection regarding classroom behaviors.

It would be worthwhile to examine the types of classroom management strategies employed by pre-service teachers in a year-long induction program. As teacher education programs change and the role and expectations of mentor teachers expand, pre-service teachers will be expected to be better managers of the classroom environment.

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Table 1
Rank Order of Classroom Management Behaviors and Strategies As Reported by Vocational Education Student Teachers

Order	Behavior	Number of Times Mentioned	Percent of Times Reported	Most Successful Strategy Reported	Least Successful Strategy Reported
1	Talking	135	30%	Verbal reprimand	Verbal reprimand
2	Disruptive	83	18%	Verbal reprimand	Ignored behavior
3	Disrespect	54	12%	Verbal reprimand	Ignored behavior
4	Inattention	31	7%	Discuss problem	Verbal reprimand
5	Not doing/Refusal to do assigned work	30	7%	Took to office	Deducted points
6	Cutting/Skipping/Leaving class	20	4%	Detention	Ignored behavior
7	Inappropriate use of equipment	14	3%	Detention	Verbal reprimand
8	Cheating	13	3%	Gave a ?0?	Verbal reprimand Ignored behavior
8	Questioning grading system	13	3%	Discuss problem	Argue with student
9	Tardy	12	3%	Argue with student	Ignored behavior
10	Profanity	11	2%	Verbal reprimand	Ignored behavior
11	Sleeping	9	2%	Wake up offender Ask offender questions	Ignored behavior
12	Smoking	7	2%	Took to office Ignored behavior	Verbal reprimand
13	Dress code violation	4	1%	Explain rules Verbal reprimand	Took to office Ignored behavior
14	Not bringing required materials to class	3	1%	Contract Provide materials	Verbal reprimand
15	Clean up	2	-	Verbal reprimand	Verbal reprimand
15	Vandalism	2	-	Have student clean up	None
15	Eating	2	-	Ignored behavior	Separation
15	Fighting	2	-	Verbal reprimand Took to office	None
16	Tobacco	1	-	Took to office	None
16	Chewing gum	1	-	None	Assign extra work
16	Racial slur	1	-	Took to office	None
	Total	450	98%		

Table 2
Rank Order of the Most Successful Strategies Reported in Handling Behavior Problems

Order	Classroom Management Strategy	Number of Responses	Percentage
1	Verbal reprimand	68	25%
2	Separation	22	8%
3	Discuss problem with student	20	7%
4	Take student to office	19	7%
5	Ignored behavior	15	6%
	Other	127	47%

Note. N=271; Other strategies mentioned one or two times on the questionnaires included such strategies as confiscate materials, assist student with personal problems, ask offender to get on task, advise students to do other work after class, and call parents.

Table 3
Rank Order of the Least Successful Strategies Reported in Handling Behavior Problems

1	Ignored behavior	67	35%
2	Verbal reprimand	66	34%
3	Argued with students	11	6%
4	Take student to office	6	3%
5	Eliminate source of problem	5	3%
	Other	39	19%

Note. N=194; Other strategies mentioned one or two times on the questionnaires included such strategies as walk out of class, name on board, busy work, cleaning, and work sheets.

Table 4
Summary of Most Reported Behavior Problems, Most Successful and Least Successful Strategies

Behavior	N*	%	Most Successful Strategy	N*	%	Least Successful Strategy	N*	%
Talking	135	30	Verbal reprimand	27	30	Verbal reprimand	25	19
			Separation	17	13	Ignored behavior	13	10
			Other **	91	67	Other **	97	71
Disruptive	83	18	Verbal reprimand	13	16	Ignored behavior	11	13
			Other **	70	84	Verbal reprimand	10	12
						Other **	62	75
Disrespect	54	12	Verbal reprimand	12	22	Ignored behavior	15	28
			Ignored behavior	6	11	Verbal reprimand	8	15
			Other **	36	67	Other **	31	57
Not doing/Refusal to do assigned work	30	7	Took to office	3	10	Deducted points	3	10
			Other **	27	90	Other **	27	90

Note. *N=Number of times mentioned. **Other behaviors and strategies were mentioned but did not represent a majority.

CREATING FUTURES – A SHARING CELEBRATION BY TEACHERS FOR TEACHERS

Susan Reynolds
Broken Arrow High School

Each year the Family and Consumer Sciences Programs Committee of the National Association Teachers of Family and Consumer Sciences (NATFACS) works toward the improvement of programs in secondary and postsecondary schools by sponsoring the Curriculum Showcase at the national convention of the Association for Career and Technical Education. The call for presenters was issued to all members of NATFACS and extended to members of related organizations. Participants are requested to focus on a variety of issues and topics including:

1. Relating programs to priority family issues, diverse populations, School-to-Work strategies;
2. Developing leadership through integration of FHA/HERO activities;
3. Increasing accountability for the development of basic skills, thinking skills, and personal qualities in students;
4. Increasing accountability for teaching students to use resources, work with others, acquire and use information, understand systems and use technology;

The December 12, 1998 showcase "Creating Futures–A Sharing Celebration" included diverse topics and displays spanning secondary, postsecondary, and higher education programs from across the nation. A description of each entry follows.

Sun – Friend or Foe

A variety of technological tools were used to describe the lasting impact of the sun's harm to the skin. Project materials spanned preschool through high school. A video, a web site, and brochures and flyers were public relations tools developed to relate this information to the public.

Sarah Raikes
Campbellsville High School
1910 Wooley Road
Campbellsville, KY 42718

HETAC's Pathways to Success

The Home Economics Teachers Association of California was successful in sponsoring legislation that establishes an incentive grant program for home economics careers and technology programs in California and reinstated the HECT Unit in the California Department of Education.

Judith Malody
Home Economics Teachers Association of California
2766 Persimmon Place
Riverside CA 92576

Entrepreneurship in the Family

Students utilizing computer software including bookkeeping and desktop publishing programs and digital camera to create brochures, business cards, and mailing lists to market a line of seasoning mixes developed by the food science class.

Susan Faseler
Hurley R-1, Box 248
Hurley, MO 65675

Indiana: Implementing the National Family and Consumer Science Education Standards

National FACS Standards have connected with Indiana's FACS courses. Newly developed state course titles and descriptions, with corresponding course competencies and content standards are cross-walked with math and language arts proficiencies.

Wanda S. Fox
Purdue University
1442 Liberal Arts & Education Bldg.
West Lafayette, IN 47907-1442

Career Connection

Examples of student work illustrate the National Program through FHA/HERO Career Connections. Special focus includes projects exploring career opportunities and assessment tools.

Carol Schramer
East High School
500 Tomcat Lane
Aurora, IL 60505

Don't Hide Your Pride!!! Create Futures with FCS

NATFACS Public Information Committee's Showcase of public relations ideas to market the profession.

Marilyn Swierk, CFCS, CFLE
P.O. Box 813
North Kingston, RI 02852

Service Learning in a Nutshell

The Who, What, Why, When, and How to integrate service-learning are included in this user friendly guide based on a national award winning program. Connection to School-to-Career educational partnerships, funding sources, resources, and reproducible masters will help to begin or enhance an existing program.

Marilyn Swierk, CFCS, CFLE
P.O. Box 813

North Kingston, RI 02852

Life Skills for Little Ones

Reinforce students' Family and Consumer Sciences skill and workforce readiness by having them teach life skills to young children–themes, art, music, games, patterns, and resources to enhance a program's visibility.

Marilyn Swierk, CFCS, CFLE
P.O. Box 813
North Kingston, RI 02852

Promote the Profession with Fun!!!

Wear T-shirts, sweats, buttons, and tote bags to showcase our profession. Come see "All I Ever Need to Know I Learned in Family and Consumer Sciences," "The Top Ten Reasons Why You Need the FACS of Life," and more!!!

Marilyn Swierk, CFCS, CFLE
P.O. Box 813
North Kingston, RI 02852

Early Childhood Initiative: Focusing on Brain Development

Early brain development and its specific implications for Family and Consumer Sciences is showcased in an activity/resource manual. Other materials and activities available for professionals to become involved in include the unprecedented "I Am Your Child" Public Engagement Campaign for Early Childhood.

Marilyn Swierk, CFCS, CFLE
P.O. Box 813
North Kingston, RI 02852

Jazz Up Your Family and Consumer Sciences Classroom

Discover how you can jazz up your Family and Consumer Sciences program. Linda Tukey, Family and Consumer Sciences teacher and 1997 Milken Family Foundation National Educator shows creative and innovative strategies that integrate academic learning and real life situations and problems.

Linda Tukey
81 Old Fairgrounds Road
Reinsfield, ME 04355

Shadowing and Internships for Teachers

This showcase illustrates how shadowing and internships have prepared Kathy Gifford to inform her students. Businesses have appreciated the opportunity to share their thoughts and concerns. These activities have been a positive public relations opportunity.

Kathy Gifford

610 6th Avenue
Keamy, NE 68847

Celebration of Children's Literature: Enhancing Your Curriculum

Children's books are used in the classroom to introduce or supplement middle school and high school Family and Consumer Sciences classroom. Areas included are: Problem Solving, Communication, Friendship, Cooperation, Anger and Conflict Resolution, Tolerance, Career Planning, and Critical Issues. Also included is information on a course titled "Child Life and Literature." This is fully integrated Family and Consumer Science and Language Arts curriculum that is team taught on the high school level.

Ann Ashby
Work & Family Studies Teacher
321 Sheridan
Winchester, VA 22182

Emily Jane O'Connor
Work & Family Studies Teacher
8810 Higdon Drvie
Vienna, VA 22182

New Curriculum Resources from Missouri

This session highlights Family and Consumer Sciences curriculum resources recently developed in Missouri. These include teacher resource guides for high school semester courses in Child Development and Food Science which utilize practical problem-solving/critical thinking strategies and performance along with performance indicators and assessments for occupational child care programs.

Debbie Pohl
Missouri DEPT of Education
P.O.Box 480
Jefferson City, MO 65202-0480

About the Author

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